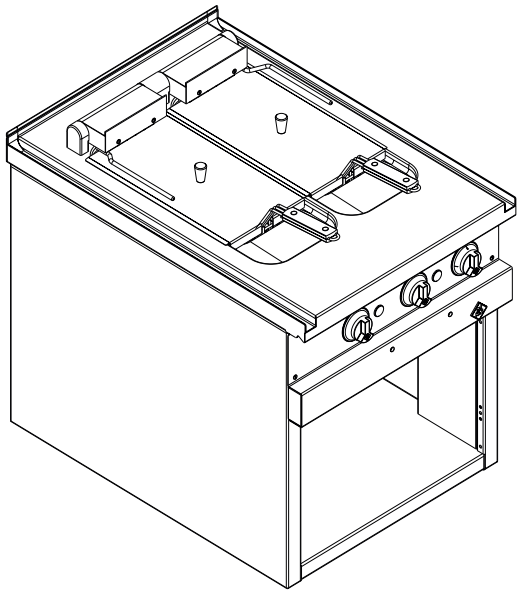
Read the operating instructions prior to commissioning

Installation instructions

Deep-fat fryer



Unit	Type of energy	Version	Model
Deep-fat fryer	Electric	Manual	XXEFRIL1… XXEFRIL2… XXEFRIPS…
		EcoControl	XXEFRIXXECO…
		Manual lift mechanism	XXEFRIXX-HU…
		EcoControl lift mechanism	XXEFRIXXECO-HU…

Translation from the original document • 2020321-00AIDE-- • 10/07/2015

Manufacturer

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Directory of contents

1 Introduction

1.1 About this manual

Figures All figures in this manual are intended as examples. Discrepancies between these and the actual unit can arise.

Target group The target group for the installation manual is trained technical personnel that is familiar with installing and operating the unit.

The instruction manual is part of the unit and contains information on safe installation of the unit.

Observe and adhere to the following instructions:

- Read the instruction manual in its entirety prior to installation.
- Make the instruction manual available to the installer at the operating site at all times.
- Preserve the installation manual throughout the service life of the unit.
- Insert any supplements from the manufacturer.
- Pass on the installation manual to any subsequent operator of the unit.

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1.1.1 Explanation of signs

DANGER
Imminent threat of danger

Failure to comply will lead to death or very severe injuries.

WARNING
Possible threat of danger

Failure to comply can lead to death or very severe injuries.

CAUTION
Dangerous situation

Failure to observe precautions can result in slight to moderately severe injuries.

ATTENTION
Material damage

Failure to comply can cause material damage.

Notes for better understanding and operation of the unit.

Symbol / sign	Meaning
•	Listing of information.
→	Action steps, which can be performed in any sequence.
1. 2.	Action steps, which must be performed in the specified sequence.
↳	Result of an action performed.

1.2 Use of the unit

This unit is not intended for the US and Canadian markets. It is not permitted to be used there.

This unit is intended to be used solely for commercial purposes, particularly in commercial kitchens.

1.3 Guarantee, warranty and liability

The warranty is void and safety is no longer assured in the event of:

- Modifications or technical changes to the unit,
- Improper use,
- Incorrect startup, operation or maintenance of the unit,
- Problems resulting from failure to observe these instructions.

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2 Safety information

The unit complies with applicable safety standards. Residual risks associated with operation or risks resulting from incorrect operation cannot be ruled out and are mentioned specifically in the safety instructions and warnings.

The installer must be familiar with regional regulations and observe them.

The installer must observe the safety instructions in these mounting instructions and in the "Safety information" chapter of the operating instructions.

Ensuring conformity with standards

Observe applicable international, European and national laws, regulations, standards and directives for the unit when transporting, setting up and connecting it.

Improper installation

Risk of property damage and personal injury from improper installation

- Install the unit only as specified in these installation instructions.
- Do not add anything to the unit or modify the unit.
- Use only original spare parts.

Transportation and storage

Risk of personal injury and property damage from improper transportation and improper storage

- Store the unit in a dry, frost-free environment.
- Observe the safety regulations for the lifting gear used.
- Attach the unit to the lifting gear securely during transport and setup, and prevent it from dropping.
- Transport the unit in an upright position, do not tilt or stack.
- Pay attention to protruding parts when transporting the unit without packaging.

Fire prevention

Risk of fire from combustible surfaces

- Observe general fire prevention regulations.
- When setting up the unit in close proximity to heat-sensitive substances or substances that pose a risk of fire, observe fire prevention regulations.

Organisational measures

Risk of property damage and personal injury from lack of organizational measures

- Identify hazard areas when transporting, setting up and connecting the unit.
- Prior to starting the installation work, notify any operators present about the procedure.
- Prior to starting the installation work, discuss how to behave in an emergency.

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- Use equipment and protective gear suitable for the activity.
- Brace housing components to prevent them from falling over and dropping.

Setup

Risk of property damage and personal injury from improper setup

- Ensure that the installation area has adequate load-bearing capacity.
- Ensure that the unit is stable when set up and aligned.
- Where safety shoes and protective gloves.

Electrical connection

Risk of fire from improper connection

- Observe applicable regional regulations of the electrical utility.
- Ensure that only electricians licensed by the electric utility connect the unit.
- Ensure that the electrical system is earthed by a protective earthing conductor.
- Note the information on the nameplate.

Risk of electric shock from live components.

- Prior to working on the electrical system, switch off the unit, disconnect the electrical system from the mains and prevent power from being switched on again. Check to ensure absence of voltage.
- Use only insulated tools.
- Do not put a unit with damaged operating elements into service.

Risk of electric shock

- The unit must be incorporated into the potential equalisation circuit through use of the specified minimum wire sizes.

Unit on casters

Risk of a line breaking if subjected to high tensile load

- Secure the unit with a chain as a strain relief for the power connection at the installation site so that no tensile load is applied to the power connection if the unit is moved.

Additional connection work

Risk of physical damage and personal injury from improper connection

- Prior to working on the unit, switch off the unit, disconnect the unit from the mains and prevent power from being switched on again. Check to ensure absence of voltage.
- Route connection lines such that they cannot be damaged from heat.

Concluding activities

Risk of damage to property and personal injury from improper connections

- Reactivate all safety devices and check that they function properly.

Commissioning

Risk of property damage and personal injury from improper commissioning

- Read the operating instructions prior to commissioning. Observe the safety instructions in this installation manual and in the "Safety information" chapter of the operating instructions.
- Put the unit into service only after a successful function test following assembly.
- Put the unit into service only after it has reached room temperature.
- Observe the units during operation.

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3 Description of the unit

3.1 Overview of the unit

3.1.1 Deep-fat fryer

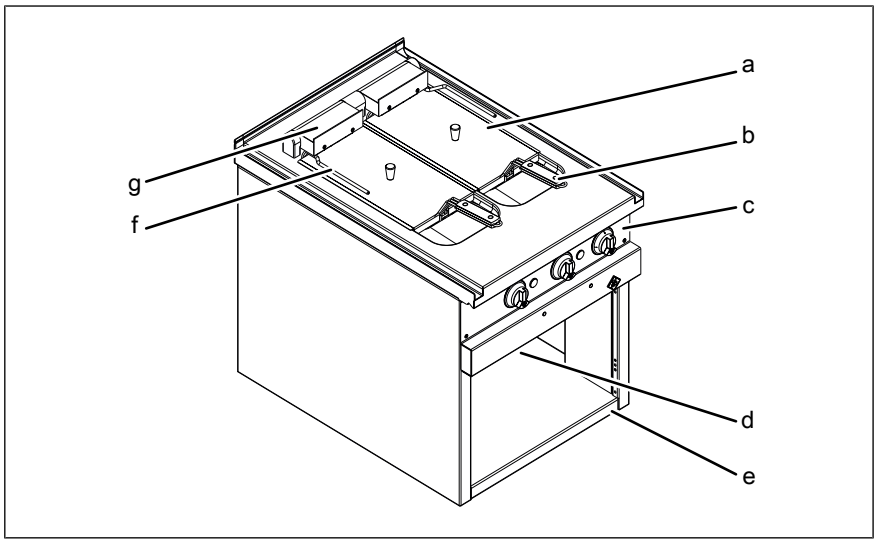

Image: Deep-fat fryer, here: OPEFRIL2

a	Lid	e	Nameplate
b	London 1 deep-frying basket	f	swivel mechanism control lever
c	Operating elements	g	swivel mechanism housing
d	Drain		

3.1.2 Deep-fat fryer with lifting mechanism

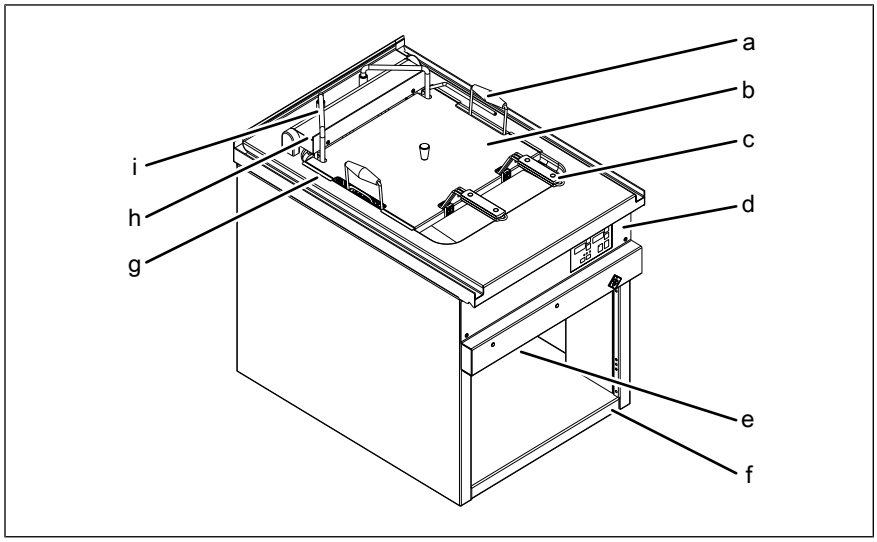

Image: Deep-fat fryer with lift mechanism, her: OPEFRIPSECO-HU

a	Paris deep-frying basket	f	Nameplate
b	Lid	g	swivel mechanism control lever
c	London 1 deep-frying basket	h	swivel mechanism housing
d	Operating elements	i	Hoist cylinder
e	Drain		

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3.2 Equipment and connection data

Electric deep-fat fryer	Model			
	Optima 700			
	O7EFRIL1…	O7EFRIL1…LE	O7EFRIL2…	O7EFRIL2…LE
Dimensions				
Length x width x height (mm)	400 x 700 x700	400 x 700 x700	600 x 700 x700	600 x 700 x700
Weight				
Weight (kg)	37	37	50	50
Heat output				
Latent (W)	4200	7000	8400	14000
Sensible (W)	540	900	1080	1800
Noise level (db (A))	< 70			
Ambient climate	5 – 40 °C, 95 % relative humidity, non-condensing			
Power connection				
Type of connection	3NPE 400 V AC 50/60 Hz			
Protection class	IPX5			
Connected load (kW)	6	10	12	20
Recommended fuse (A)	3 x 16	3 x 16	3 x 20	3 x 32

Electric deep-fat fryer	Model			
	Optima 700		Optima 850	
	O7EFRIPS…	O7EFRIPS…LE	OPEFRIL1…	OPEFRIL1…LE
Dimensions				
Length x width x height (mm)	600 x 700 x700	600 x 700 x700	400 x 850 x700	400 x 850 x700
Weight				
Weight (kg)	50	50	31	31
Heat output				
Latent (W)	7000	14000	4200	7000
Sensible (W)	900	1800	540	900
Noise level (db (A))	< 70			
Ambient climate	5 – 40 °C, 95 % relative humidity, non-condensing			
Power connection				
Type of connection	3NPE 400 V AC 50/60 Hz			
Protection class	IPX5			
Connected load (kW)	10	20	6	10
Recommended fuse (A)	3 x 16	3 x 32	3 x 16	3 x 16

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Electric deep-fat fryer	Model			
	Optima 850			
	OPEFRIL2…	OPEFRIL2…LE	OPEFRIPS…	OPEFRIPS…LE
Dimensions				
Length x width x height (mm)	600 x 850 x700	600 x 850 x700	600 x 850 x700	600 x 850 x700
Weight				
Weight (kg)	59	59	59	59
Heat output				
Latent (W)	8400	14000	7000	14000
Sensible (W)	1080	1800	900	1800
Noise level (db (A))	< 70			
Ambient climate	5 – 40 °C, 95 % relative humidity, non-condensing			
Power connection				
Type of connection	3NPE 400 V AC 50/60 Hz			
Protection class	IPX5			
Connected load (kW)	12	20	10	20
Recommended fuse (A)	3 x 20	3 x 32	3 x 16	3 x 32

Electric deep-fat fryer	Model		
	HotLine		
	HLEFRIL1…	HLEFRIL1…LE	HLEFRIL2…
Dimensions			
Length x width x height (mm)	400 x 700 x700	400 x 700 x700	500 x 700 x700
Weight			
Weight (kg)	36	36	46
Heat output			
Latent (W)	4200	7000	8400
Sensible (W)	540	900	1080
Noise level (db (A))	< 70		
Ambient climate	5 – 40 °C, 95 % relative humidity, non-condensing		
Power connection			
Type of connection	3NPE 400 V AC 50/60 Hz		
Protection class	IPX4		
Connected load (kW)	6	10	12
Recommended fuse (A)	3 x 16	3 x 16	3 x 20

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Electric deep-fat fryer	Model		
	HotLine		
	HLEFRIL2…LE	HLEFRIPS…	HLEFRIPS…LE
Dimensions			
Length x width x height (mm)	500 x 700 x700	500 x 700 x700	500 x 700 x700
Weight			
Weight (kg)	46	44	44
Heat output			
Latent (W)	14000	7000	14000
Sensible (W)	1800	900	1800
Noise level (db (A))	< 70		
Ambient climate	5 – 40 °C, 95 % relative humidity, non-condensing		
Power connection			
Type of connection	3NPE 400 V AC 50/60 Hz		
Protection class	IPX4		
Connected load (kW)	20	10	20
Recommended fuse (A)	3 x 32	3 x 16	3 x 32

EcoControl basic control settings - Level 1

Setting	Parameter	Standard value	Setting range	Explanation
Program number On XXEFRIL2… for left deep-frying tank	IdL	---	001 — 255 *	Program number
Program number On XXEFRIL2… for right deep-frying tank	Idr	---	001 — 255 *	Program number
Automatic process start	APS	0	0	Deactivated, signal sounds
		With lift mechanism: 1	1	Activated, no signal at process start; with lift mechanism: automatic basket lowering at process start
Lowering of the cooking temperature after end of process	dt_	015	000 — 999	Lowering of the cooking temperature after process ends, in Kelvin (K)
Automatic adaptation of cooking time	tc_	0	0	Deactivated
			1	Enabled
Without function	H__	---	---	Without function
Sets the temperature unit	F__	0	0	Celsius (°C)
			1	Fahrenheit (°F)
* Can only be set if a program number was selected beforehand.				

EcoControl basic control setting - Level 2

Setting	Parameter	Standard value	Setting range	Explanation
Process start signal tone	53	10	000	Deactivated
			001 — 099	Duration in seconds (s)
			100	Continuous sound
Process end signal tone	54	10	000	Deactivated
			001 — 099	Duration in seconds (s)
			100	Continuous sound
Kitchen management system interface	59	01	01 — 63	Unit address for interface
Temperature set value - Program 1 — 8	80 — 87	*	100 — 300	Temperature in respective program
Temperature set value - Program 9 — 16 On XXEFRIL2… for left deep-frying tank - Program 1 — 8	88 — 95	*	100 — 300	Temperature in respective program
Process time - Program 1 — 8	96 — 103	*	000	The elapsed cooking time is entered
			010 — 599	Duration in seconds (s)
			600	Continuous operation
			999	No entry
Process time - Program 9 — 16 On XXEFRIL2… for left deep-frying tank - Program 1 — 8	104 — 111	*	000	The elapsed cooking time is entered
			010 — 599	Duration in seconds (s)
			600	Continuous operation
			999	No entry
*depending on the model				

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4 Transporting the unit

4.1 Transporting the unit to the installation site

CAUTION
Risk of property damage and personnel injury from tipping equipment

- Do not linger next to or behind raised equipment.
- Move raised equipment carefully.

ATTENTION
Risk of physical damage from improper transport

- Transport the unit upright.
- Do not tilt or stack the unit.
- Pay attention to protruding parts when transporting the unpacked unit.

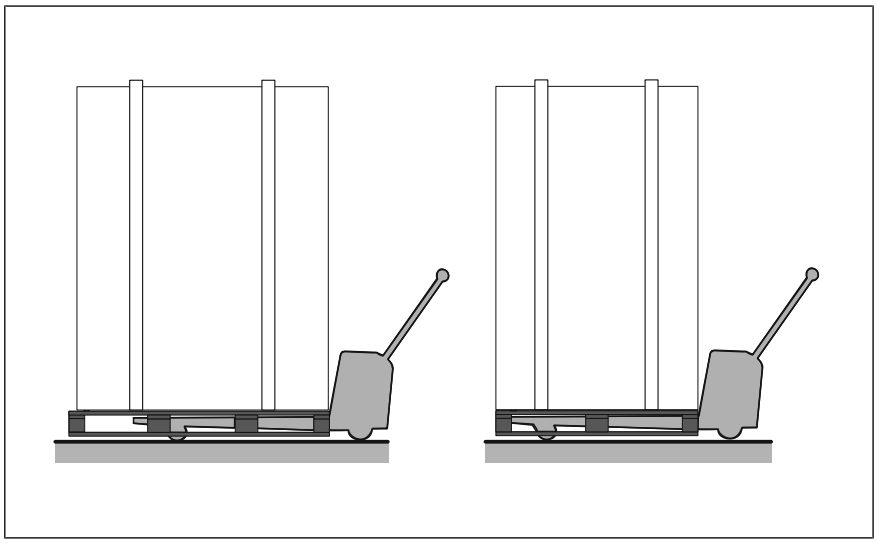

Image: Lengthwise and crosswise transport on pallet

→ Use suitable transport means to move unit to installation site.

4.2 Unpacking the unit

CAUTION
Risk of injury from sharp edges

- Wear protective gloves.

When unpacking the unit, inspect it for transport damage.

Do not install damaged units or put into service.

1. Remove the packaging.
2. Pull the protective film off the unit.
3. Clean the unit (see "Cleaning and maintaining the unit" in the operating instructions).
4. Enter the information from the nameplate into the commissioning report.

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5 Setting up the unit

Planning drawing

The planning drawing and additional documents are available on the manufacturer's Internet page by entering the equipment number (see Impressum).

5.1 Placing the unit on the equipment legs

ATTENTION

Risk of physical damage from improper transport

- When transporting the unit without packaging, pay attention to protruding equipment components (e. g. handles).

Requirement The floor must support the weight of the unit

1. Use appropriate lifting gear to lift the unit.
2. Set up the unit in accordance with the planning drawing.
3. Align the unit lengthwise and crosswise (see "Aligning the unit").

5.2 Setting up the unit on the base

ATTENTION

Risk of physical damage from improper transport

- When transporting the unit without packaging, pay attention to protruding equipment components (e. g. handles).

ATTENTION

Risk of physical damage from improper transport

- Lift unpacked floor-standing unit in the vicinity of the equipment legs.

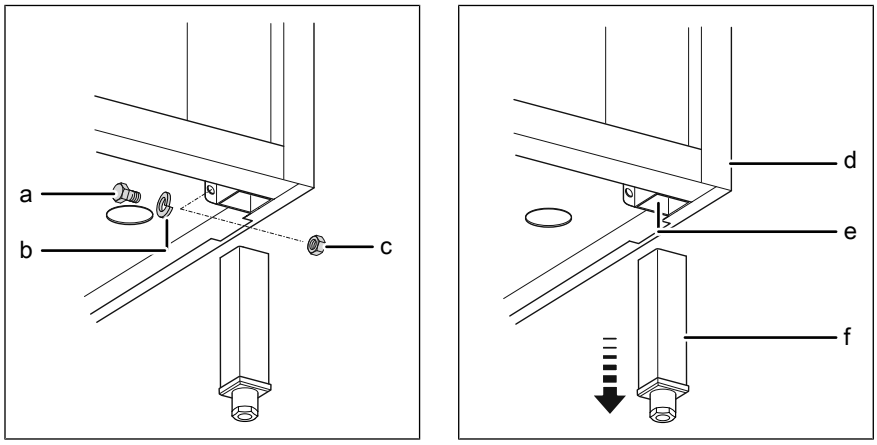

Image: Removing equipment leg

a	Screw	d	Unit
b	Washer	e	Leg socket
c	Nut	f	Equipment leg

Requirement The floor must support the weight of the unit

1. If the base is not horizontal, identify the highest area of the base and start the setting-up procedure there.
2. Use appropriate lifting gear to lift the unit.
3. Lift the unit over the power connection cables and set it up in accordance with the planning drawing.
4. Align the unit lengthwise and crosswise (see "Aligning the unit").

5.3 Aligning the unit on the equipment legs

Requirement Floor level

1. Place a spirit level on the covering of the unit.
2. Level the unit by screwing the equipment legs in or out.

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5.4 Aligning a unit on a base

1. Use appropriate lifting gear to lift the unit.
2. Use suitable spacers to correct for uneven areas and level the unit lengthwise and crosswise.

5.5 Connecting the unit

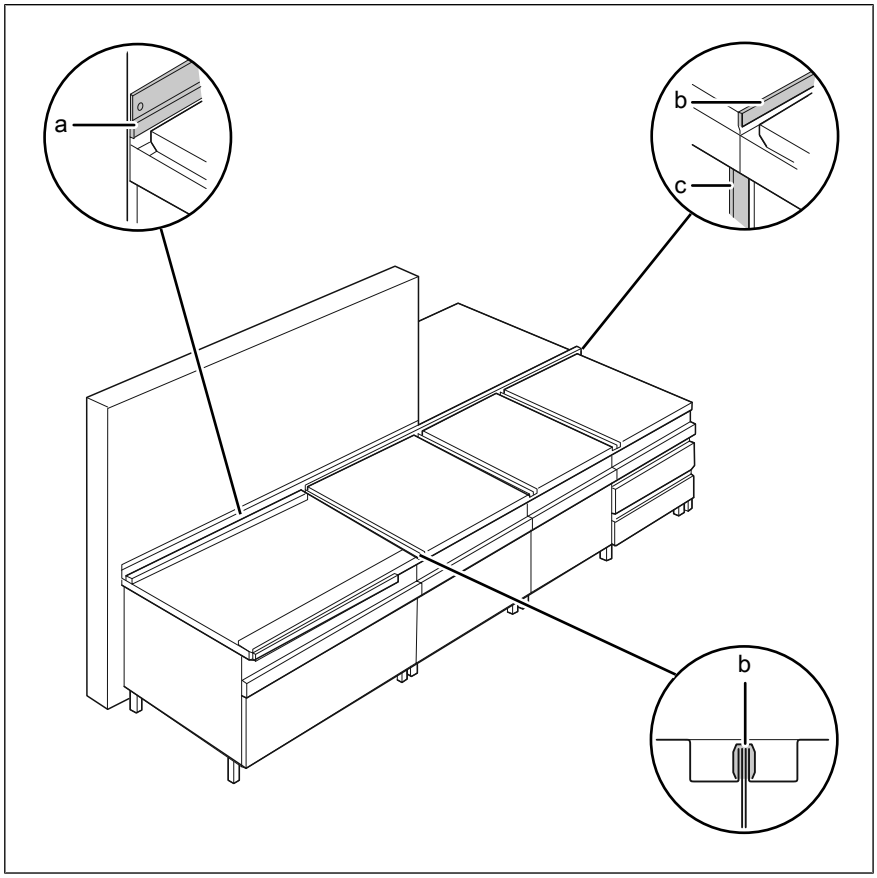

Image: Connecting a floor-standing unit

a	Wall attachment profile	c	Cover plate
b	Connecting profile		

→ When setting up with other equipment from the same manufacturer, use end and connecting profiles.

6 Connecting the unit

6.1 Opening and closing the housing

6.1.1 Removing and attaching the cover panel for the connection terminals

Removing the cover panel for the connection terminals

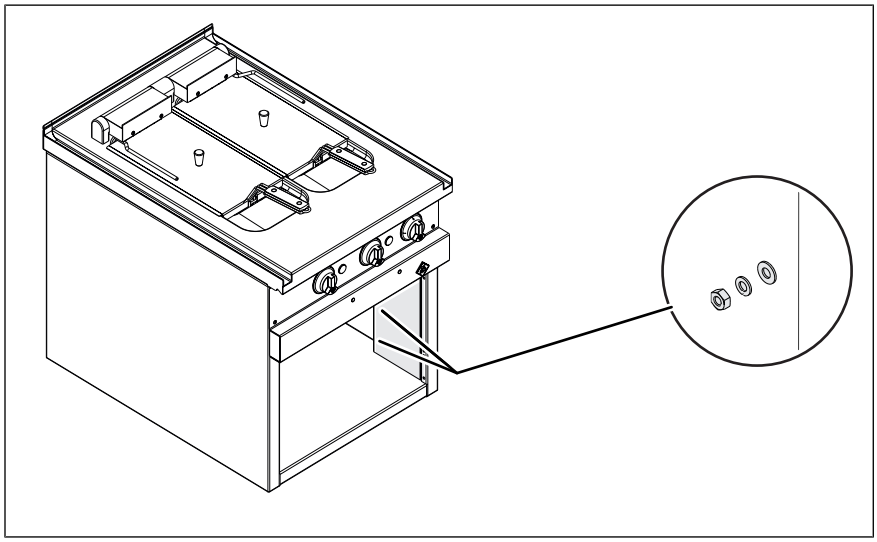

Image: Removing the cover panel for the connection terminals

1. Slacken the nuts on the cover panel.
2. Carefully pull the panel forward.

Attaching the cover panel for the connection terminals

→ Insert the cover panel behind the edge and guide over the bolts.

→ Secure the cover panel with nuts.

6.2 Making the electrical connection

The unit must be connected on the basis of the information on the nameplate and this manual.

Installation work

Electrical installation work must be carried out by an electrician. Comply with the local regulations of the electrical utility company.

Permanent connection

The protective pipe for the permanently installed power connection cable must not protrude more than max. 30 mm from the floor or base.

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Disconnector

An all-phase disconnector with a contact gap of at least 3 mm must be installed in order to disconnect the unit from the electric mains at any time.

Equipotential bonding

The unit must be included in a potential equalisation system.

6.2.1 Electrical connection description

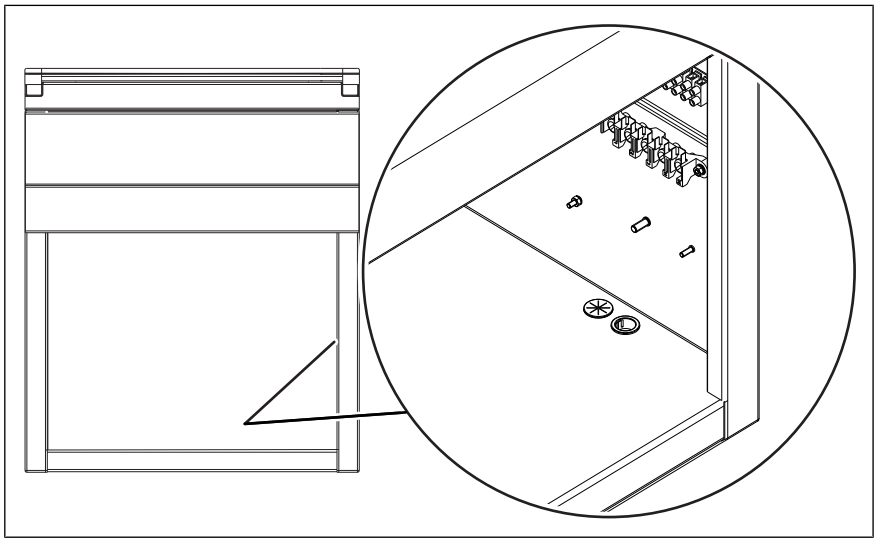

Image: Power connection

6.2.2 Connecting the power connection cable

Requirement Power connection cable disconnected

Cover panel for connection terminals removed

1. Insert the electric power cable into the unit.
2. Connect the power connection cable in accordance with the wiring diagram.
3. Close the housing (see "Opening and closing the housing").
4. Fill out the commissioning report.

6.2.3 Connecting the power optimizing system

Requirement Unit disconnected from the electric mains

Cover panel for connection terminals removed

1. Pull the connection cable into the unit through the opening next to the entry for the electric power cable.
2. Bring the connection cable to the connection terminals.
3. Connect power connection cable in accordance with the wiring diagram.
4. Close the housing (see "Opening and closing the housing").
5. Fill out the commissioning report.

6.2.4 Connecting the potential equalisation

Equipotential bonding

The unit must be included in a potential equalisation system.

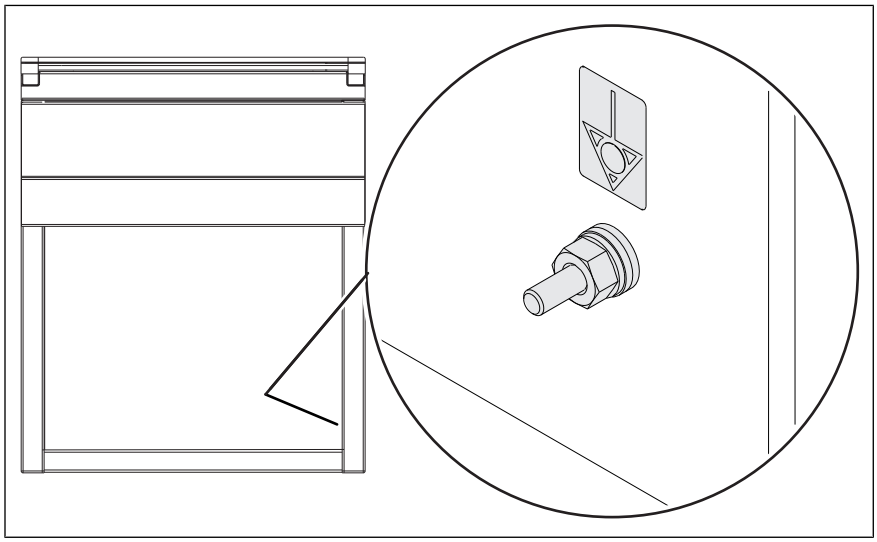

Image: Potential equalization connection

Requirement Cover panel for connection terminals removed

1. Run and attach the potential equalisation line to the marked connection.
2. Fill out the commissioning report.

6.3 Making the basic control settings

The control can be set only on models with EcoControl.

The basic setting for the unit is preset on delivery. The values can be changed. For an overview of the settings, see "Equipment and connection data".

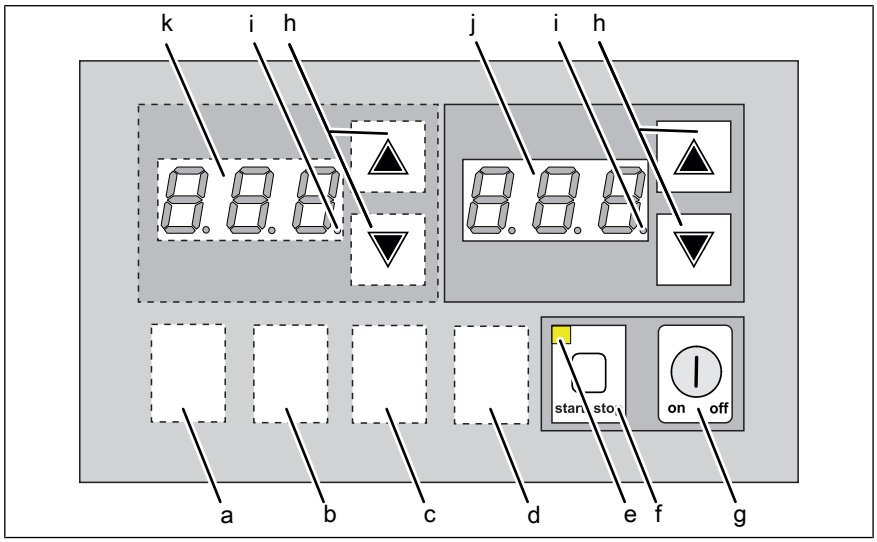

Image: Simplified representation of the EcoControl operating elements

a Button *a*
b Button *b*
c Button *c*
d Button *d*
e "start stop" indicator light
f "start stop" button
g "on off" button
h *Set* button
i *Heating* Indicator light
j *Right* display
k *Left* display

6.3.1 Changing the EcoControl basic control setting - Level 1

If no button is pressed within 5 seconds, the Setting menu closes automatically without saving.

Requirement Unit is on

1. Press and hold the button *a*.
2. Also press button *c* .
3. Release button *a*.
4. Release button *c*.
   ↪ The *left* display shows parameters.
   ↪ The *right* display shows the set value.
5. Using the *Set* buttons on the *left* display, select the parameter (see "Equipment and connection data").
6. Using the *Set* buttons on the *right* display, set the desired value.
7. To save the settings, press and hold button *a*.
8. Also press button *c*.
9. Release button *a*.
10. Release button *c*.

6.3.2 Changing the EcoControl basic control setting - Level 2

Requirement Unit is on

1. Press button *b*, button *c*, button *d*, button *b* and button *a* in succession.
   ↳ The *left* display shows parameters.
   ↳ The *right* display shows the set value.
2. Using the *Set* buttons on the *left* display, select the parameter (see "Equipment and connection data").
3. Using the *Set* buttons on the *right* display, set the desired value.
4. To save the settings, press the "start stop" button.
5. Press the "on off" button to leave the Settings menu.

6.4 Connecting the kitchen management system

Only models with EcoControl can be connected to a kitchen management system.

6.4.1 Description of how to connect the kitchen management system

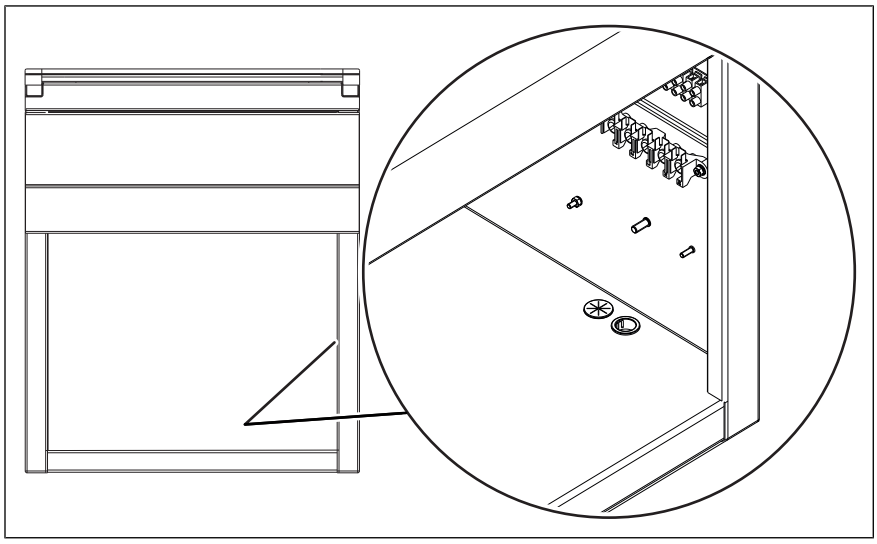

Image: Kitchen management system connection

6.4.2 Connecting the HACCP data cable

Requirement Unit disconnected from the electric mains
Cover panel for connection terminals removed

1. Guide the HACCP data cable into the unit.
2. Connect the HACCP data cable as shown in the wiring diagram.
3. Set the unit address (see "Changing the EcoControl basic control setting - Level 2 ").
4. Close the housing (see "Opening and closing the housing").
5. Fill out the commissioning report.

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7 Checking operation

7.1 Checking the manual controls

1. Switch on the unit (see Operating instructions).
2. Start deep-fat frying, set the maximum temperature.
   ↳ The *Heating* indicator light illuminates.
3. On models with a lift mechanism: Check that the lift mechanism if functioning properly.
4. Check that the deep-frying tank is heating.
5. Set the minimum temperature.
   ↳ The *Heating* indicator light goes out.
   ↳ The controls are functioning.
6. Stop deep-fat frying.
7. On models with a lift mechanism: Check that the lift mechanism if functioning properly.
8. On models with two deep-frying tanks: Repeat the procedure for the second deep-frying tank.
9. Switch off the unit.
10. Fill out the commissioning report.

7.2 Check the EcoControl controls

1. Switch on the unit (see Operating instructions).
   ↳ The *right* display shows "P- -".
2. Start deep-fat frying, set the maximum temperature.
   ↳ The *Heating* indicator light illuminates.
   ↳ The "start stop" indicator light illuminates.
3. Check that the deep-frying tank is heating.
   ↳ Temperature reached, audible signal sounds.
   ↳ On models with a lift mechanism: The "start stop" indicator light flashes.
4. On models with a lift mechanism: Press the "start stop" button.
   ↳ The deep-frying basket lowers.
5. On models with a lift mechanism: Check that the lift mechanism if functioning properly.
6. Set the minimum temperature.
   ↳ The *Heating* indicator light goes out.
   ↳ The controls are functioning.
7. Stop deep-fat frying.
   ↳ On models with a lift mechanism: The deep-frying basket is lifted out.
8. On models with two deep-frying tanks: Repeat the procedure for the second deep-frying tank.
9. Switch off the unit.
10. Fill out the commissioning report.

8 Putting the unit into service

If the unit is not put into service immediately after being connected and the function check, all inspections must be repeated.

Requirement Power connection made
Housing closed
Operation successfully tested

1. Instruct the operator.
2. Fill out the commissioning report.

8.1 Filling out the commissioning report

General	Yes	No
Information from the nameplate entered? SN: _____ Typ: _____ QN (Hi): _____ E: _____ Bez: _____ Item-Nr.: _____ (if listed)	☐	☐
Obvious damage to the unit? What and where?: _____	☐	☐
Unit levelled?	☐	☐

Electrical connection		Yes	No
Power connection made properly?		☐	☐
☐ Equipotential bonding	☐ Power optimizing system		
☐ Floating contact	☐ …		
Electrical connections made properly?		☐	☐
Residual-current protective device connected immediately before this unit?		☐	☐
Residual-current protective device connected before this and other units?		☐	☐

Basic control setting		Yes	No
Temperature unit set?		☐	☐
☐ °C	☐ °F		
Kitchen management system set? Unit Address: _____		☐	☐

Kitchen management system	Yes	No
Has the kitchen management system been connected properly?	☐	☐

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Function check	Yes	No
Controls are functioning?	☐	☐
Lift mechanism functioning?	☐	☐

Final notes	Yes	No
Was the unit put into service?	☐	☐
Comments:		
Operator trained?	☐	☐

Electrical installation was provided by:			
Company	Installer	City, date	Signature

The connection to a kitchen management system was made by:			
Company	Installer	Place, date	Signature

The function check was performed by:			
Company	Installer	City, date	Signature

Operator training was provided by:			
Company	Installer	City, date	Signature


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