

Operating Instructions for deep fat fryers



Applicable to models: **SERIES 2000**

V200 (T)	V2200 (T)
V250 (T)	V2525 (T)
V400 (T)	V600



Your model:

Please give the information below when ordering or requesting repairs.

Spares: see **page 11**

Your service centre:

Declaration of conformity

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confirms that the above-mentioned products conform to the following standards:

Machine safety: EN 60335-2-37:95+A1:96: Par. 11, 13 and 19
EMC: EN 55014:93 and EN 55014-2:97
 EN 61000-3-2:95 and EN 61000-3-3:95

Ecublens, 15 January 1998

The responsible officer from Valentine Fabrique SA

The EEC representative:

Name: M. F. Wenger
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Director of Valentine Equipment LTD
Reading RG1 8JS (GB)

Date of creation: 15.01.98 by W/mm	Date of modification: 03.09.03 by fd	File:
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Warning:

The information given in these operating instructions may be amended at any time. Valentine Fabrique SA accepts no liability for errors in these instructions and any consequent damage.

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Dear Customer,

Congratulations on purchasing a Valentine fryer, a product of the best quality well known in Europe for 50 years.

The following operating instructions are based on **EC** and international regulations, as well as on the new product liability.

1. Important information

1.1 Warning

Before using the fryer you must:

- ⇒ **study the following operating instructions and follow them closely**
- ⇒ **instruct the operating personnel and make them aware of the risk presented by food remains.**

Valentine Fabrique SA accepts no liability for damage caused through improper operation and failure to adhere to these operating instructions.

1.2 Risks from food remnants



- Hot oil can cause severe burning. Therefore avoid any direct contact with the hot oil.
- Thoroughly drain the food to be fried before frying.
- Never allow water or ice to come into contact with the hot oil, otherwise the oil will spatter.
- Ensure that your face is not near the oil pan when food is immersed in it.
- Beware of clouds of steam and hot oil spray.
- Never allow anything but food to drop into the oil pan, e.g. gas cartridges, sealed bushings, etc. These explode and cause considerable spattering of oil.
- The fryer must not be operated without supervision. If a large amount of smoke develops, switch off immediately (switch to "0")
- The oil level must not drop below the "MIN" oil level mark. If the oil level is too low there is a fire risk.
- N.B.: Old or frequently used oil/fat has a lower flash point and is more easily ignited. It may suddenly boil over when food is immersed.
- If the fryer catches fire, never extinguish with water. It is recommended that a fire extinguisher or fire extinguishing blanket be installed near the fryer.

Valentine fryers conform to the most stringent safety standards and are equipped with breakage-proof temperature limiters. Damage or fault must be excluded wherever humanly possible.

1.3 Periodic inspections

- ◆ Have the operation of the working thermostat and security thermostat checked (see 5.3)

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2. Technical data

Model:	Power [kW]	Connection 3P+N+E 3x400V [A]	Frequency [Hz]	Connection cable	Capacity in litres	Working thermostat	Safety thermostat	Timer	Chips fried [kg /h]	Protective system	Weight [kg]	Dimensions [cm]
V200	7.2	10	50-60	5x1.5	7-9	1	1	1	19-23	IP X4	34	20x58x85
V200T	11	16	50-60	5x1.5	7-9	1	1	1	26-32	IP X4	34	20x58x85
V2200	14.4	20	50-60	5x2.5	2x 7-9	2	2	2	38-46	IP X4	52	40x58x85
V2200T	22	32	50-60	5x4	2x 7-9	2	2	2	52-64	IP X4	53	40x58x85
V250	7.2	10	50-60	5x1.5	8-10	1	1	1	19-23	IP X4	35	25x58x85
V250T	11	16	50-60	5x1.5	8-10	1	1	1	26-32	IP X4	35	25x58x85
V2525	14.4	20	50-60	5x2.5	2x 8-10	2	2	2	38-46	IP X4	55	50x58x85
V2525T	22	32	50-60	5x4	2x 8-10	2	2	2	52-64	IP X4	56	50x58x85
V400	14.4	20	50-60	5x2.5	18-20	1	2	1	38-46	IP X4	49	40X58X85
V400T	22	32	50-60	5x4	18-20	1	2	1	52-64	IP X4	50	40X58X85
V600	21.6	32	50-60	5x4	25-28	1	3	1	57-68	IP X4	69	60X58X85

3. Installation

Erect fryer, to level rotate the setscrews underneath the front feet.

The fryer must not stand on combustible surfaces. Local safety regulations must be complied with.

N.B.: The slimline fryers V200 and V200T, as well as V250 and V250T, must not be freely erected (risk of tipping over). They must be installed between 2 units of furniture, or they must be supported on the sides.

3.1 Electrical connection

Only experts may connect and commission the fryers.

Your mains data (voltage, current, fuse protection) must conform to the data on the fryer rating plate (The rating plate is mounted on the inside of the door (Figs. 1 to 3 = D).

The electrical connection must conform to local regulations, essentially as follows :

- Fitting a mains plug on the connecting cable. Earth conductor = yellow/green, neutral conductor = blue
Phase sequence is immaterial.
- Any fixed connection must be made via a mains switch with all-pole isolation (min. contact distance 3 mm.).
- Before connection is made to the mains, check that the main switch "E" of the fryer is in the "0" position.
Never heat without oil !

3.2 Installation examples

A considerable amount of steam is generated when preparing chips. A good steam extractor is strongly recommended.

3.2.1 Installation example I (Fig. 1)

Wall socket [F] resistant to dripping water IP X2 or water spray IP X4

3.2.2 Installation example II (Fig. 2)

Fryer free-standing or next to cooking range. Connection column [H] with socket IP X2 or IP X4

3.2.3 Installation example III (Fig. 3)

Connection box [J] with 3P+N isolating switch arranged above fryer. Cable permanently connected. Because of the considerable steam generated the box must be watertight IP X5.

3.3 Cleaning

Pull the fryer forward [K] to clean the rear wall and bottom (Fig. 4). The cable must therefore be long enough to do this.

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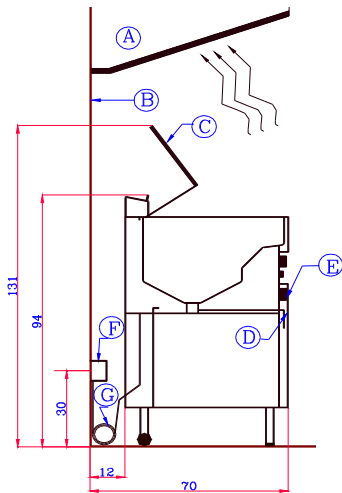


Fig. 1: Fryer against wall with socket IP X2

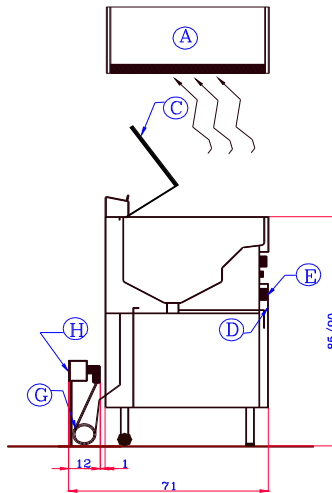


Fig. 2: Fryer free-standing (next to cooking range)

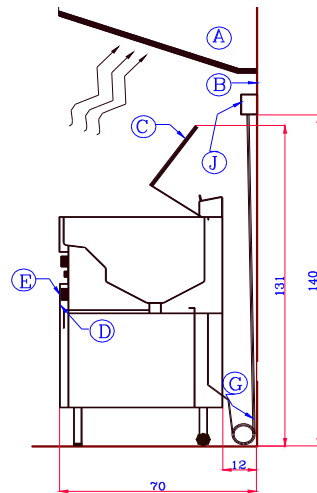


Fig. 3: Fryer against wall, with switchbox IP X5

N.B.: The V200 and V250 fryers, which are only 200 and 250 mm wide respectively, must be secured on the sides (risk of tipping over).

- | | |
|--|--|
| A Steam extractor | F Wall socket IP X2 |
| B Wall | G Connecting cable 1,9 m |
| C Heating element folded up (cleaning) | H Connection column |
| D Rating plate with unit no. | J Connection box with isolating switch IP X5 |
| E Main switch behind door | K Fryer pulled forward for cleaning the rear wall and bottom |

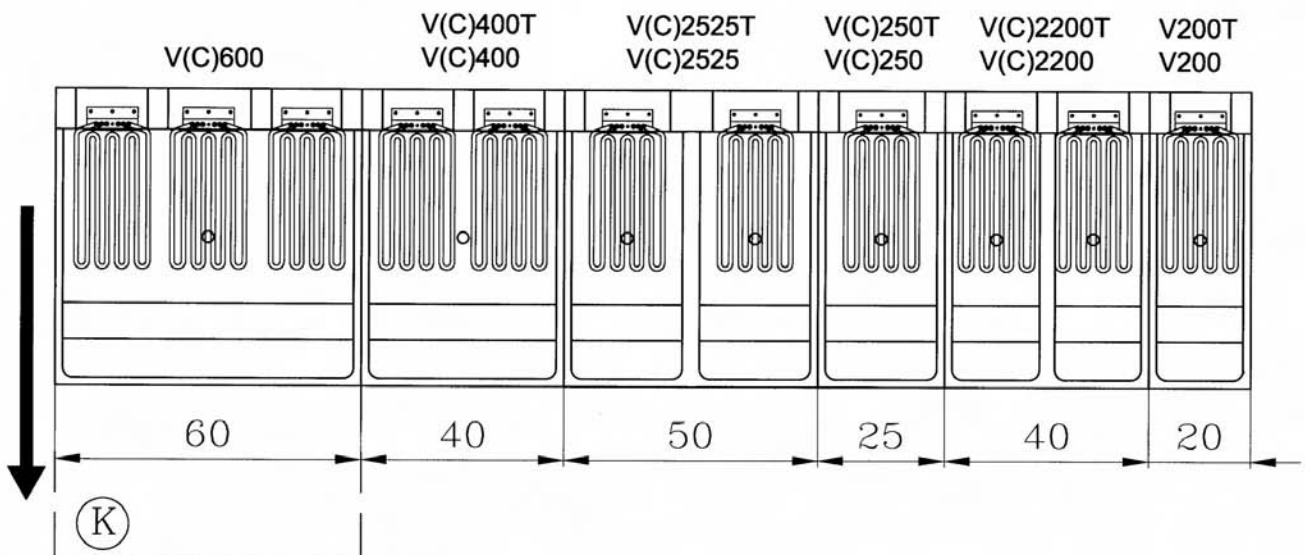


Fig. 4

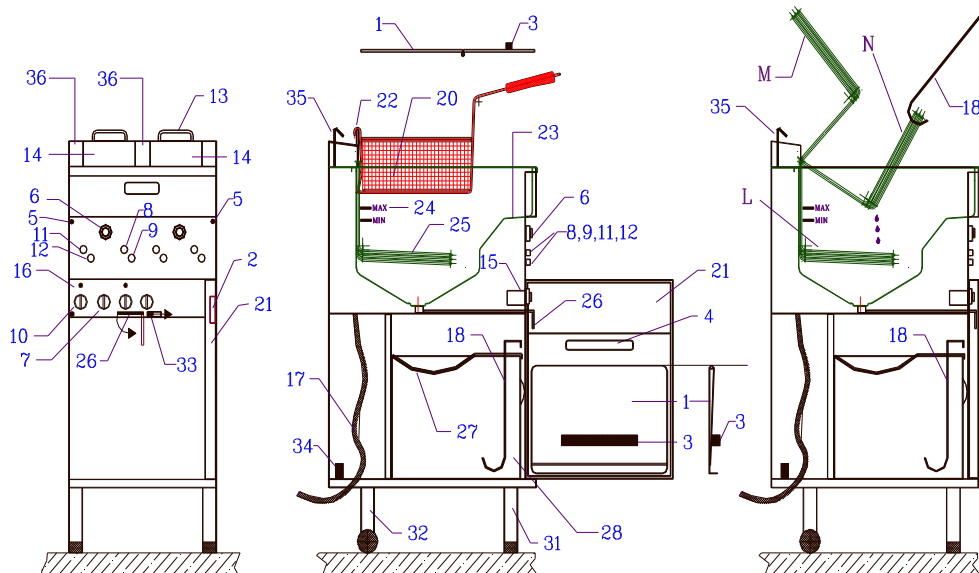
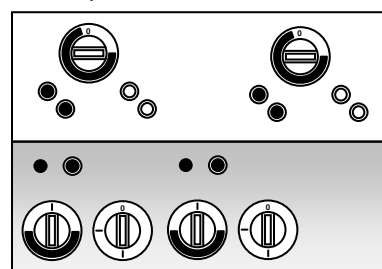
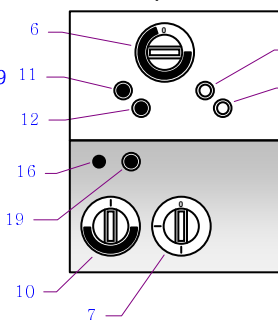
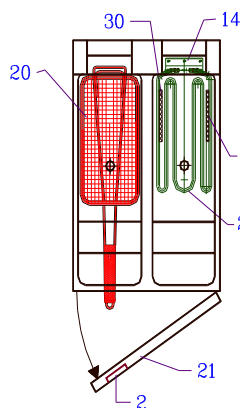


Fig. 5 Detail control panels

- 1 Oil pan

- 2 Oil pans



Above the door

Behind the door

Heating element may be folded up : L = working position N = draining M = cleaning

- | | |
|--|---|
| 1 Lid mounted in door | 19 Red lamp = safety thermostat off |
| 2 Door handle (door open) | 20 Basket |
| 3 Lid handle | 21 Door (open) |
| 4 Rating plate | 22 Basket hook |
| 5 Control panel mounting | 23 Oil pan |
| 6 Timer | 24 MAX - MIN oil level mark |
| 7 Main switch (behind door) | 25 Heating element coil |
| 8 Colourless lamp = melting | 26 Oil cock lever |
| 9 Colourless control lamp = frying | 27 Filter |
| 10 Thermostat (behind door) | 28 Discharge tank |
| 11 Yellow control lamp = heating | 29 Thermostat sensor on heating element |
| 12 Green control lamp = immersing basket | 30 Security thermostat sensor |
| 13 Basket suspension bracket | 31 Foot with setscrew |
| 14 Heating element box | 32 Foot with roller |
| 15 Security thermostat | 33 Safety oil cock |
| 16 Reset button for security thermostat | 34 Connection or potential equalisation |
| 17 Connecting cable 1,9 m. | 35 Heating element interlock |
| 18 Hook for increasing heating | 36 Safety switch |

4. Instructions for use

4.1 Pouring in oil

Grip lid [1] (Fig. 5, page 6) by handle [3] and place inside the door [21] (hinge at the top) ◇ Whilst working, the folded lid is supported inside the door.

Pour peanut oil into the fryer basin as far as the **MAX** level mark [24] ◇ Solid fat must first be melted in a pan, not on the heating element!

4.2 Operation : Melting - frying

Open door, move switch [7] to "Melt" position ⇒ Upper colourless signal lamp [8] on the right comes on. Reduced power for block of fat in fryer, also economic heating of oil, approx. 10-15 minutes.

Switch thermostat to 150°, for example ⇒ Yellow signal lamp on the left comes on.

As soon as the first order is taken, turn switch [7] to "Fry". ⇒ Lower colourless lamp on the right comes on
⇒ Yellow "Heat" lamp comes on
Switch thermostat to approx. 180° ⇒ The temperature reaches 180° in 2-3 minutes

As soon as the green cook light comes on, immerse basket

Set timer, e.g. 3 minutes. As soon as the timer sounds, raise basket, shake and suspend. ⇒ After half the frying time raise and shake basket. Do not knock against oil pan.

Always top up with oil after use. When the oil level is too low the power drops considerably and the oil is overheating.

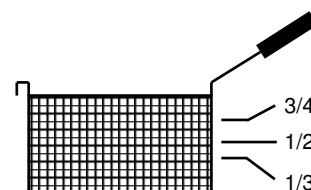
Never operate below the "MIN" oil level mark.

**Never overfill basket.
Follow filling stages 1, 2, 3 in table**

**➔
otherwise**

- oil is cooled excessively
- frying time is extended
- the food being fried absorbs oil

Temp. °C	Food being fried	Minutes	Basket filling height
190	Deep frozen chips	3 (1+1)	-1/3-
160	Prefrying raw chips	4 - 6	-3/4-
190	Finish frying, blanching chips	2 - 3	-1/3-
170	Veal pork schnitzel, cutlets	3	-1/2-
170	Deep frozen chicken legs	6 - 8	-1/2-
180	Fish	2 - 4	-1/2-



4.3 How to save oil

- * Do not heat the fryer for hours before or after service (The heating time is only 5-6 minutes).
→ **High temperatures ruin the oil, not the food!**
- * Limit oil temperature to 180 °C instead of 200 °C
→ **Oil life is extended by approx. 40 % !**
- * After each service pour oil through a microfilter (optional extra). This retains even microscopic waste. Working time = 1 minute, including cleaning of filter !

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4.4 Care of oil

Filter the oil after each use, approx. at 60°C. N.B: Risk of combustion!

Open door, turn main switch [7] to " 0 " position. Turn red lever [26] of oil cock complete downward, and at the same time push the safety pin to the right. Oil flows through the filter [27] into the tank [28]

⇒ Do not heat when oil pan is empty!
⇒ Is the cleaned filter on the tank ?
⇒ Pour oil back into the fryer.
⇒ Clean filter and tank.

Finally cover the oil pan with the lid mounted in the door. Frying basket is stainless.

⇒ The lid protects the oil from dust and light.
⇒ Is washed once a week.

*** Important:** If you do not open the drain cock completely (red lever in vertical position), the drain cock can be damaged!

4.5 Maintenance of fryer, changing oil

The fryer must be thoroughly cleaned when the oil is changed. As soon as the oil turns brown and begins to smoke (after approx. 20 to 40 operating hours, according to the operating temperature and grade of oil), the oil must be changed.

Waste oil must not be poured into the drain.

You must deliver waste oil to a disposal service.

Open door, turn main switch to " 0 ". Lift heating element into the drain position " L ". Drain oil, remove tank and clean filter.

⇒ Do not lift heating element fully, otherwise oil will run along the rod to the heating element box = additional cleaning.

Pour boiling water with a degreasing agent (soda) into the oil pan up to approx. 5 cm. above the "MAX" oil level mark. If you clean daily you will never have encrustation on the heating element or oil pan!

⇒ Allow the oil pan to operate for 1-2 hours, and clean heating element with a brush with a handle. Do not damage the thermostat sensor. Now raise heating element fully and clean oil pan down to the bottom. After cleaning, rinse thoroughly with hot water. Residues of cleaning agents or detergents ruin the fresh oil you are pouring in.

Wipe the oil pan and heating element clean with a dry cloth. Close oil cock, pour in fresh oil up to the " MAX " level [24]

⇒ Raise the heating element. Push back the interlock [35] and tilt the heating element fully down above the drain position.

Exclusive advantages of your Valentine fryer:

Higher power due to dialogue system (US + European patent)

⇒ When the green cook light comes on, immerse basket immediately. The thermostat does not switch off and the fryer is at maximum power.

Automatic saving (patent)

⇒ During the waiting time the fryer only heats at half power, saving oil and power.

Super heating

⇒ Very long heating elements, all in chromium steel, low loading, saves oil.

Thermostat

⇒ Reacts very quickly. Sensor in centre of oil pan.

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5. Repairs

5.1 Simple faults

Fault	Possible cause	Remedy
The fryer is no longer heating. No lamp lights up	* No power	◇ Check fuses, plugs and socket
The red lamp lights up	* Safety thermostat has switched off	◇ Press reset button (see 5.3)
The fryer is not heating sufficiently	* One phase is missing on the power supply cable	◇ Check fuses
The fryer is not heating sufficiently	* The switch has remained on "Melt"	◇ Turn button to "Fry"
Oil cock is sticking	* Sticking due to old oil residues	◇ Actuate frequently with hot oil. i.e. filter oil daily

The special mains cable must only be replaced by the manufacturer or his customer service representative.

5.2 Complex faults

Fault	Possible cause	Remedy
The signal lamps come on, but the fryer is no longer heating	* Heating element defective	◇ Call the service centre *
The fryer is not heating sufficiently	* Interruption of a phase * Heating element defective	◇ Call the service centre *
The fuses blow when fryer is switched on	* Short-circuiting	◇ Call the service centre *
The fault current safety switch (FI) in the fuse box switches off	* Moisture or poor insulation in the electrical circuit	◇ Call the service centre *
The colourless signal lamp does not come on or is flashing	* Main switch defective	◇ Call the service centre *
The yellow signal lamp does not come on or is flashing	* Thermostat defective	◇ Call the service centre *
The green signal lamp does not come on or is flashing	* Thermostat defective	◇ Call the service centre *

* **Important:** If you call the customer service dept, you must give the following information:

- Type of fryer	- V250
- Unit no.	- U253A111K3
- Volts, amps, kilowatts	- 3x415V, 10.5A, 7.5kW

Example:

You will find this information on page 1 of these instructions and on the fryer rating plate. If the information is correct the fitter gains time, the customer saves money!

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5.3 Safety thermostat

Every heating element is fitted with a breakage-proof temperature limiter. The reset button is located behind the door on the upper edge of the control panel. (Fig 5, no. 16, page 6). The red signal lamp [19] to the right of the reset button lights up as soon as the temperature limiter switches off.

The safety thermostat breaks the heating circuit

- * when oil temperature is over 230 °C
- * when capillary tube is damaged
- * when temperature drops below 0 °C

and also in the case of improper use

- * if fryer is heated without oil
- * if the oil level is too low
- * if you drain the oil before switching off the fryer
- * If the heating element is not in the correct position in the oil pan
- * if a block of fat is melted on the heating element

Resetting the safety thermostat

Before resetting, find out why it has switched off (see above list).

- **Allow fryer to cool.** The thermostat sensor on the heating element cannot be switched on if it has not cooled down (to accelerate cooling raise heating element to the drain position).
- **Push the red button [16].** Lamp [19] will go out. **N.B. Fryer is heating!** If the safety thermostat switches off again the fryer must be switched off. Inform the service centre.

5.4 Safety switch

As soon as the heating element is raised to the "drain" position the safety switch (Fig. 5, page 6, no. 36) interrupts the power supply.

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5.5 Spare parts

Only use original spare parts. When ordering spare parts indicate not only the unit no. but also the article no. given in the table.

Fryer type	Type No. U, I, P
Unit number	
Voltage, current and power	

This information is given on page no. 1

Your fryer:

Name	Your fryer:												Art. Nr.	Diagram code	Tech. data
	V200	V200T	V2200	V2200T	V250	V250T	V2525	V2525T	V400	V400T	V600				
Colourless control lamp (melt, fry)	2	2	4	4	2	2	4	4	2	2	2		6324	H3, H4, H8, H9	230V
Yellow control lamp (heat)	2	2	4	4	2	2	4	4	2	2	2		6325	H1, H6	230V
Green control lamp (immerse)	1	1	2	2	1	1	2	2	1	1	1		6326	H2, H7	230V
Red control lamp (Security)	1	1	2	2	1	1	2	2	2	2	3		6327	H5, H10, H15	230V
Resistance for control lamp	4	4	8	8	4	4	8	8	3	3	3		6328	R20 - R26	120K;2 W
Safety temperature limiter, sensor Ø4	1	1	2	2	1	1	2	2	2	2	3		631451	S1,S2,S3	20A
Working thermostat, sensor Ø4	1		2		1		2		1		1		6311	S20, S21	16A
Working thermostat, sensor Ø4		1		2		1		2		1			6310	S20, S21	16A
Safety switch XP-52	2	2	4	4	2	2	4	4	4	4	6		6321	S5 - S10	16A
Main switch 10A 42.04000.021	1		2		1		2		1	1	1		631652	S30	10A
Main switch 16A 43.34832.003		1		2		1		2					631751	S40,S41	16A
Connection terminal 20 EDS			4	4			4	4	4	4	4		637401	XT1	16mm ²
Switch relay 3 x 20 A									2	2	3		6281	K1 -	3X20A
Fuse 6.3AT 5x20 mm									1	1	1		6402	F1	6.3AT
Fuseholder									1	1	1		6401	F1	FPG
Heating element															
H E 7.2/7.5kW 3N400/415V	1		2		1		2		2		3		62911SA		
H E 11/11.8kW 3N400/415V		1		2		1		2		2			63023SA		
Miscellaneous															
Timer 15 minutes	1		2		1		2		2		2		6341		
Button for timer 15 min.	1		2		1		2		2		2		6335		
Button for thermostat 110-190°C	1		2		1		2		1		1		6336		
MELT - FRY button	1		2		1		2		1		1		6331		
Ball cock 1"G (oil cock)	1		2		1		2		1		1		6431		
Nut 1" G for oil cock	1		2		1		2		1		1		63419		
Basket, filter															
Basket V200 290 x 160 x H130	1		2						2				641704		
Basket V250 290 x 210 x H130					1		2						641904		
Basket V400 big 290 x 350 x H130									1*				641802		*(option)
Basket V600 small 290 x 255 x H130											2		642004		
Basket V600 big 290 x 550 x H130											1*		642102		*(option)
Metal filter for drain tank V200	1		2										6427		
Metal filter for drain tank V250					1		2						6428		
Metal filter for drain tank V400									1		1		6429		