

OVEN LINE

# Elettrodrago Elektros





# ELETTRODRAGO ELEKTROS

# Greater productivity, less consumption

Elettrodrago Elektros exceeds the performance of normal electric ovens with armoured resistances and offers an always perfect baking result, with small, medium and also large sized products.

In short, Elettrodrago Elektros operates at low temperatures without the excesses of traditional electric ovens with armoured resistances and uniformly distributes the heat on the product, resulting in an excellent baking quality.

From today, with the advantages of Elettrodrago Elektros and with your skills, your customers will be even more satisfied and loyal!

ELETTRODRFIGO ELEKTROS

## How much bread do you bake in an hour?

The new technologies introduced in the Elettrodrago Elektros oven have made it possible to lower the installed power to the limits of the category without penalising performance.

The Elettrodrago Elektros electric oven was designed to easily bake up to 8 kg of bread per hour for each square metre of oven (for example, with an 8.4 m2 Elettrodrago Elektros oven, you can bake almost 70 kg of bread in an hour!). Baking with the right power is important because it helps you obtain:

**LOWER INITIAL INSTALLATION EXPENSE** resulting from the lower power to request from the operator

LOWER FIXED MONTHLY COST for your electrical bill WORK SMOOTHLY WITHOUT FORCED PAUSES

(the oven has to wait for you and not vice versa) because time is money!

If you need even high levels of productivity, that is not a problem: Elettrodrago Elektros can be provided upon request with greater power (with Super Power productivity of up to 13 Kg/m2h is possible), which can be easily activated from each chamber pushbutton panel, also only during the period where more power is required.





## The non-plus-ultra for small and medium sized bread loafs

Elettrodrago Elektros is the new concept of electric oven that is the result of Polin's 75 years of experience, for quality that is always appreciated by bakers.

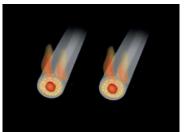
Today, modern technology makes it possible to produce an oven that, thanks to its low installed power, guarantees economies of operation that were never before obtained, while guaranteeing extreme flexibility and an abundance of steam for incomparable baking quality.

Elettrodrago Elektros encompasses the winning quality and functionality of the previous models together with new, significant design developments.

The use of advanced electronic equipment and management software makes it possible to precisely control the oven functions, optimising performance and reducing waste, resulting in lower oven costs.







#### Not all armoured resistances are the same

The special armoured resistances that form the core of Elettrodrago Elektros offer unmatched performance: thickness, form, power, heating zones are designed with attention to the minimum detail in order to offer you:

# 5 fundamental qualities

- **GENTLE BAKING** appreciated by your customers, especially with small, medium and large sized loaves, thanks to the low temperature of the resistances.
- 2 PERFECT BAKING OF ANY PRODUCT thanks to the considerable temperature stability
- 3 QUICK RETURN TO TEMPERATURE AFTER PLACING ITEMS IN THE OVEN thanks to the quick reaction of the resistances positioned directly in the baking chamber
- 4 LARGE NUMBER OF RESISTANCES for diffused and constant heat in the entire baking chamber
- **5** BROWNED RESISTANCE SURFACES

The high number of special steel plated resistances inserted in each baking chamber guarantees:

### 2 incomparable advantages

- LARGE RADIANT SURFACE for gentle, never violent, heating of the product, which is fundamental for perfect baking
- 2 LOW POWER SUPPLIED TO EACH RESISTANCE for exceptional duration and reliability

With Elettrodrago Elektros nothing is left to chance: each baking chamber is equipped with resistances with 4 different types of power that guarantee:

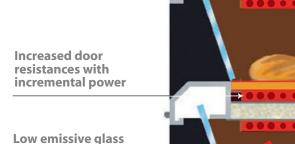
### 2 incomparable advantages

- IMPROVED HEAT DISTRIBUTION between the ceiling and the bed plate and the bottom of the chamber. The power and arrangement of the resistances have been studied to create a uniformly heated baking surface.
- BETTER COMPENSATION OF DISPERSION FROM THE DOOR with increased resistances with incremental power. The power of the baking chamber resistances increases gradually towards the door to compensate for the heat dispersion due to normal oven loading/unloading operations.

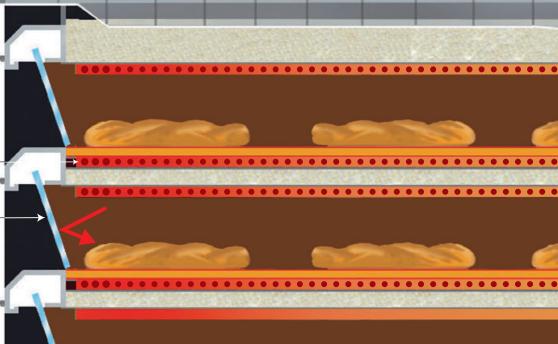


#### **IMPORTANT**

All of the described advantages are enhanced by synergical operation of the various components. This technology is the result of baking studies carried out in Polin's Research & Development department.



The doors have low emissive glass (standard) that maintains the heat inside the baking chamber, further reducing dispersion and consumption up to 4.5%.





#### BAKERY MANAGEMENT COMPUTER

### Valuable advantages!



The Bakery Management Computer (optional) is a valuable tool for your profitability, because it helps you achieve considerable savings in your electricity bill that are able to significantly reduce the cost of the bread you bake.

It consists of a special Management Control unit, dedicated software and a special network of sensors that automatically and constantly verify the energy flows used by the equipment, optimally redistributing them to the oven.

This considerably reduces the kW necessary to work at full productivity.

Better use of the global power, thanks to the possibility of also intelligently using the energy for the oven that becomes available during the pauses in operation of the other operative units in the bakery.

This makes it possible to work easily with reduced power.

Possibility of selecting an oven with the desired baking surface, even if fewer kW are granted than what is necessary. This means that you can work peacefully even if the kW provided by the operator are lower than the global power required for the bakery.

Lower initial installation expense resulting from the lower power to request from the operator.

Lower monthly fixed cost (by using less power you pay less). Certainty of not overrunning power (which is very expensive) thanks to the constant measurement of the consumption of all the users in the bakery and due to the intelligent use of the kW available for the oven.

Targeted management of the power supply in relation to the two-hour rate, increasing use when energy is delivered at a lower cost.

Possibility of programming the automatic switching on of the oven on a daily and weekly basis.

Self-diagnostics function (check-up) that makes it possible to immediately discover the cause of the malfunction and therefore request service, correctly indicating the problem to be fixed.

#### ECONOMISER COMPUTER

### One computer, many benefits

The function of this tool is similar to the Bakery Management Computer, but it is restricted to the oven users.

It is used by manually setting the maximum kW value assigned to the oven. Although it achieves lower total kW savings than what is guaranteed by the Bakery Management Computer, it still represents a significant improvement in the reduction of overall consumption.

It works by deviating and using the power that becomes available during the operating pauses of various oven parts (chambers, steam units).

Possibility of selecting an oven with the desired baking surface, making it operate with fewer kW than its real power.

Lower installation expense due to less required power. Moderate monthly fixed cost.



Possibility of avoiding power overruns by manually setting a maximum fixed value you calculate, also for other users present in the bakery (the monthly cost applied by the Operator varies depending on the excess consumption of kW indicated in the contract, even momentarily).

At this point, your oven will operate in a manner to never exceed the kW value that was assigned to it.

Better use of the power supply in relation to the two-hour rate, increasing its use when the energy costs less.

Possibility of programming the automatic switching on of the oven on a daily and weekly basis.

Self-diagnostics function (check-up) that makes it possible to immediately discover the cause of the malfunction and therefore request service, correctly indicating the problem to be fixed.



#### ELECTROMECHANICAL

# With Elettrodrago Elektros, each chamber becomes a separate oven. 100%.

Each chamber can be independently adjusted.

Unlike other ovens that have one keyboard, Elettrodrago Elektros has independent displays, controls and keyboards and an electronic board for each chamber, equipped with a series of splitters.

This avoids pointless stress and keeps you from wasting time.

This avoids pointless stress and keeps you from wasting time. In this way, you can easily and immediately manage each chamber using its keyboard, adjusting:

- Baking temperature
- Ceiling bed plate heat ratio
- Baking time and steam delivery time
- Switching on/off of the steam unit
- Switching on/off of the chamber
- Switching light on/off in each chamber

In other ovens, many of these commands are limited to one key (for example, the light, which turns on in all chambers).

You can also control the settings for each chamber on its specific display:

- Set temperature
- Actual temperature
- Ceiling bed plate heat ratio
- Baking time

And program all of the oven's other baking functions, being certain to correctly and easily set each chamber.

The automatic activation card (optional) can be programmed up to seven days in advance, with different parameters for each day of the week.

Exclude only the chamber not operating due to maintenance reasons (in an oven with a single electronic card, this means stopping all the chambers).



#### **ENERGY LEVEL KEY**

to suitably set an adequate quantity of energy based on the type of product to be baked.



#### CONTROLLED HEATING KEY

for heating at the start of work. Eliminates wasting of energy, making the first batch the same as the subsequent ones.



#### **PAUSE BETWEEN BAKING KEY**

for two advantages when a pause is necessary:

- reduces energy consumption by up to 18%
- eliminates overheating the bed plate

### Heat stability

Elettrodrago Elektros is equipped with a thermic inertia control program that makes it possible to maintain the set temperature without excessive changes in temperature.



# Also maintenance offers an interesting advantage



All of the ordinary control or maintenance operations can be carried out from the front of the oven (also those involving the electrical panel).

### When necessary, the steam disappears quickly

The steam extraction hood has a strong exhaust fan (800 m3/h, 1500 m3/h with an optional two speed motor) made fully out of stainless steel. The steam is evacuated quickly and uniformly, thanks to the large extraction surface and the special grid design.







# The doors adjust to your work method

When used manually, they are opened by pushing with the frame or the oven paddle, remaining open, and they close by moving the levers upward. When used automatically, they open and reclose when they come into contact with the frame. They also have a special low emissive glass that is easy to remove for better cleaning.







#### The design pays attention to your every gesture

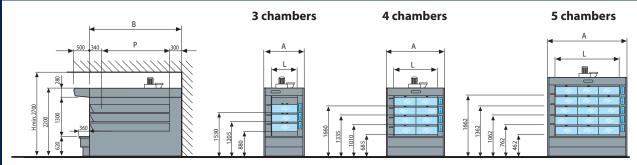
The new ergonomic shape of the handles that adjust the steam intake valves and the door opening levers makes them safe and easy to use. They are made out of a long-lasting aluminium alloy that does not require maintenance. The Elettrodrago Elektros design has no sharp corners. Every edge is carefully rounded to protect the safety of the operator.

# Integrated oven loader Your best baking assistant

The integrated Polin oven loader is an accessory designed to be perfectly integrated with Elettrodrago Elektros. Made completely out of stainless steel, it is used to rationalise the oven loading and unloading operations, quaranteeing many benefits:

- You can work alone without an assistant.
- The raised stand-by position keeps the oven door completely free (and the area in front of it)
- Handling can take place from the right or from the left.
- You can load manually, using specific transfer frames or with a bread turning frame.
- All of your gestures become quicker and more precise.
- You can also take the baked bread out of the oven (thanks to the optional accessory).





- Useful chamber height 3 chamber ovens: height 200-200-250 mm 4 chamber ovens: height 200-200-200-200 mm
- 4 chamber ovens: height 170-170-200-250 mm 5 chamber ovens: height 170-170-170-170-200 mm

	Chamber	Baking surface	Overall dimensions		Useful chamber dimensions		Electrical power with steam unit				
					Width L			Economiser computer	Bakery management computer	Super Power	Super Power with economiser
			А	В		Р					computer
	n°	m²	mm	mm	mm	mm	kW	kW	kW	kW	kW
4,3 / 84x170-3	3	4,3	5,7 7,1 5,4 7,2 1475 9,0 6,5 8,7	2340	840	1700	23,0	15,3	11,6	35,9	23,9
5,7 / 84x170-4	4	5,7		2340		1700	30,4	22,7	15,3	47,5	35,6
7,1 / 84x170-5	5	7,1		2340		1700	37,8	30,1	19,0	59,2	47,3
5,4 / 84x214-3	3	5,4		2780		2140	28,1	18,4	14,2	46,1	30,8
7,2 / 84x214-4	4	7,2		2780		2140	37,2	27,9	18,7	61,3	45,9
9,0 / 84x214-5	5	9,0		2780		2140	46,4	37,0	23,3	76,4	61,0
6,5 / 84x258-3	3	6,5		3220		2580	30,7	20,5	15,5	52,6	35,1
8,7 / 84x258-4	4	8,7		3220		2580	40,7	30,4	20,5	69,9	52,3
10,8 / 84x258-5	5	10,8		3220		2580	50,7	40,5	25,5	87,2	69,7
6,3 / 124x170-3	3	6,3	4 5 6 1875 3 5	2340	1240	1700	25,3	16,9	12,8	41,5	27,7
8,4 / 124x170-4	4	8,4		2340		1700	33,5	25,1	16,9	55,1	41,2
10,5 / 124x170-5	5	10,5		2340		1700	41,8	33,3	21,0	68,7	54,9
8,0 / 124x214-3	3	8		2780		2140	31,3	20,9	15,8	53,5	35,7
10,6 / 124x214-4	4	10,6		2780		2140	41,5	31,1	20,9	71,1	53,2
13,3 / 124x214-5	5	13,3		2780		2140	51,8	41,3	26,0	88,7	70,9
9,6 / 124x258-3	3	9,6		3220		2580	34,9	23,3	17,6	61,0	40,7
12,8 / 124x258-4	4	12,6		3220		2580	46,3	34,7	23,3	81,1	60,7
16,0 / 124x258-5	5	16,0		3220		2580	57,7	46,1	29,0	101,1	80,8
9,4 / 186x170-3	3	9,4	2500	2340	1860	1700	33,0	22,0	16,6	57,2	38,1
12,5 / 186x170-4	4	12,5		2340		1700	43,7	32,7	22,0	76,0	56,9
15,8 / 186x170-5	5	15,8		2340		1700	54,5	43,5	27,4	94,8	75,8
12,0 / 186x214-3	3	12		2780		2140	41,1	27,4	20,7	72,5	48,3
16,0 / 186x214-4	4	16		2780		2140	54,6	40,9	27,4	96,4	72,3
19,9 / 186x214-5	5	19,9		2780		2140	68,0	54,3	34,2	120,4	96,2
14,0 / 186x258-3	3	14		3220		2580	47,2	31,5	23,7	82,7	55,1
19,0 / 186x258-4	4	19		3220		2580	62,7	47,0	31,5	110,0	82,5
24,0 / 186x258-5	5	24,0		3220		2580	78,2	62,5	39,2	137,4	109,8

\*Power for each steam unit = kW 2,5













