1 INTRODUCTION

1.1 Purpose of the document

The repair manual provides support for the official technician to help diagnose faults and repair the electrical appliances.

Apart from the repair manual, the technician may also use the following documents:

- Blow-up diagram of parts of the appliance.
- Diagrams
- List of parts
- Associated technical reports on specific occasions

The diagnosis of faults plus their repair should only be carried out by an officially authorised technician.

1.2 Pictograms

Warning!

Components sensitive to electrostatic shock:
Respect EGB reference

Sharp edges:
Use protective gloves!

Information or advice

Electrical hazard!

2 SAFETY

2.1 Safety warnings

Electrical hazard!

Repairs should only be carried out by the manufacturer's technical staff.

Inadequate repairs can harm the users.

The sheath and framework may be subjected to voltage in case of failure.

The appliance should be disconnected from the mains before dismounting. It contains parts inside that are subjected to high voltage.

Always use a current-breaker switch if it is necessary to conduct low-voltage tests.

The earth connection should not exceed standardised values. This is of the utmost importance for people's safety and normal working conditions of the appliance.

Once the appliance has been repaired, it should be subjected to tests VDE 0701 or the specific regulations that are in force in the country concerned.

The replacement of the power cable can only be carried out by authorised technical staff, using the replacement cable.

Special warnings for induction hobs!

Induction hobs comply with the safety and electromagnetic compatibility regulations currently in force (EN50366). People with fitted pacemakers should abstain from using or repairing such an appliance. The operation of the appliance may interfere with the operation of the pacemaker.

People with hearing aids may experience discomfort.

2.2 Repair warnings

Warning!

Never attempt to carry out repairs involving the indiscriminate exchange of component parts.

Proceed in a systematic way, with reference to the technical specifications supplied with the appliance.

The electronic plates should not be repaired, but replaced with original spare parts. Exceptions are indicated in separate documents.

Components sensitive to electrostatic shock:
Respect EGB reference

Sharp edges:
Use protective gloves!

2.3 EGB

2.3.1 Concept

EGB = “Elektrostatisch Gefährdete Bauelemente“ (Electrostatic-Sensitive Devices)
(Component sensitive to electrostatic shock)

2.3.2 Pictogram

Electronic devices with components that are sensitive to electrostatic shock (EGB in German) are marked with the pictogram shown here.

2.3.3 General specifications

The use of cutting-edge electronic technology in current electrical appliances guarantees high levels of profitability, protection of the environment, easy handling, operability and safety. Such high-performance technology can only be handled by qualified technicians with specialised knowledge.

All electronic modules and constructive units incorporate elements with a potentially dangerous electrostatic voltage.

2.3.4 Dangerous components

Amongst others, these constructive elements are threatened by electrostatic voltage:

- µProcessors
- ICs
- Transistors
- Tiristors
- Triacs
- Diodes
- etc.

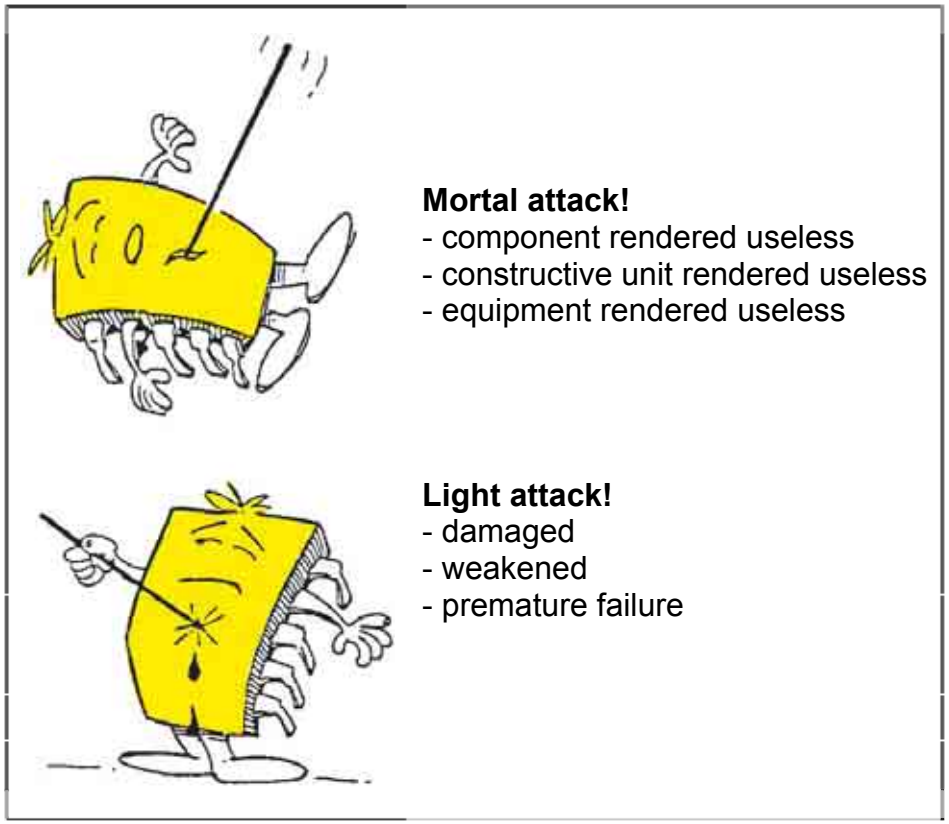
2.3.5 Causes and effect

The human body can generate electrostatic charges in certain environmental situations. This charge is favoured by dry air and the coating on insulated floors.

People can transfer an electrostatic voltage:

- of up to 35,000 volts when standing on a non-conductive carpet.
- of up to 12,000 volts when standing on a non-conductive PVC floor.
- of up to 1.800 volts when sitting in a padded chair.

The electrostatic voltage in the human body is transferred to electronic devices and components that are sensitive to electrostatic shock by touching them, sometimes resulting in damage depending on the circumstances.



2.3.6 Indications for components sensitive to electrostatic shock

In all electronic modules and constructive units there are components that are sensitive to electrostatic shock.

In order to protect such components, the following steps should be taken:

1. Read the corresponding label for the modules and constructive units with care.
2. Before touching and measuring any components that are sensitive to electrostatic shock, apply an electrostatic protection system (wristband with earth block).
3. Avoid touching these components with electrostatically-sensitive plastics (plastic sheeting, etc.).
4. Constructive units, modules and plate should be picked up as far as possible without touching the printed circuit boards and connections.
5. Components that are sensitive to electrostatic shock should not be located close to monitors or televisions.
6. For transport purposes, only conductive materials or the original packing should be used.

2.3.7 Electrostatic protection system

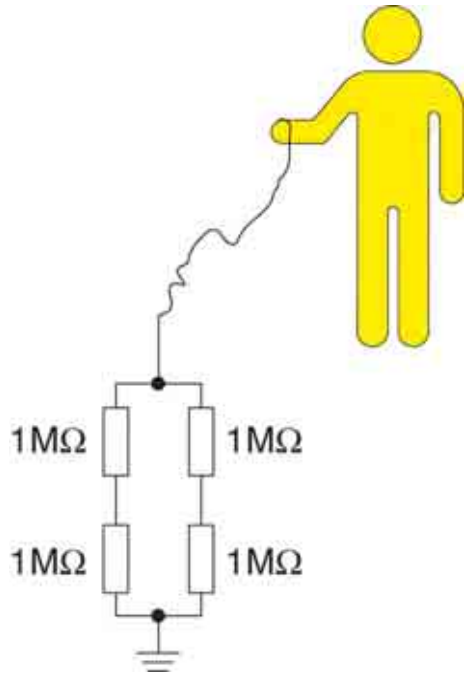
There are several different electrostatic protection systems.

These electrostatic protection systems act to prevent the electrostatic shock from affecting the human body or by shunting the existing electrostatic voltage to earth.

In the electrostatic protection system used at the after-sales customer service, the electrostatic voltage in the body is transferred by means of a wristband and earth block.

For safety reasons, this is not carried out directly but using a combination of elements

The connection with the earthwire conductor or protective conductor should be in perfect condition



Combination of elements with wristband

3 COMPONENTS AND FUNCTION

3.1 Electronic Induction (ELIN)

There are two types of elin (electronic induction).

- One with its own power supply (“left or main elin”)
- Another one without its own power supply (“right or secondary elin”), which is powered by the main elin.

They are attached to the elin bracket with clips, plus a couple of screws.

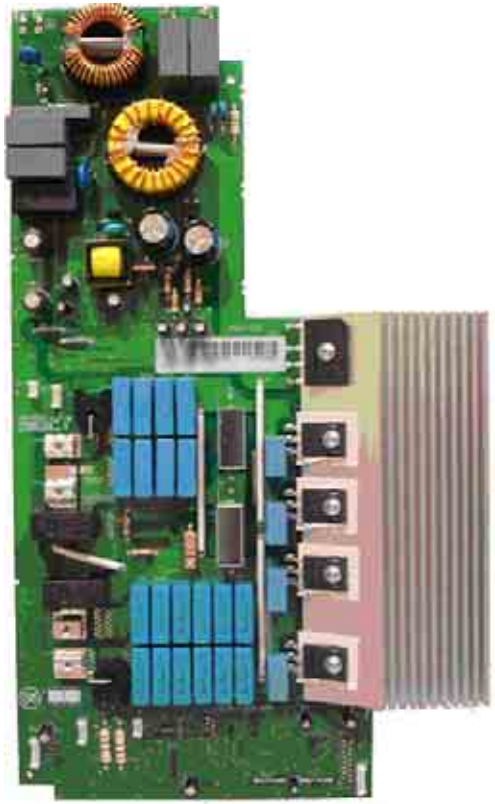
They communicate with the TouchControl through the LIN connector.

The TouchControl sends power level orders for each burner and the elin returns the state of the burner (pan recognition, error detection, etc.)

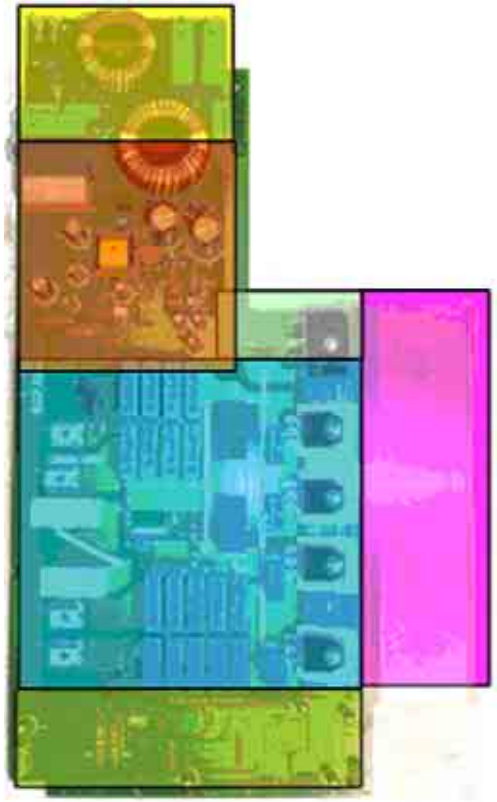
Depending on the type of model there are:

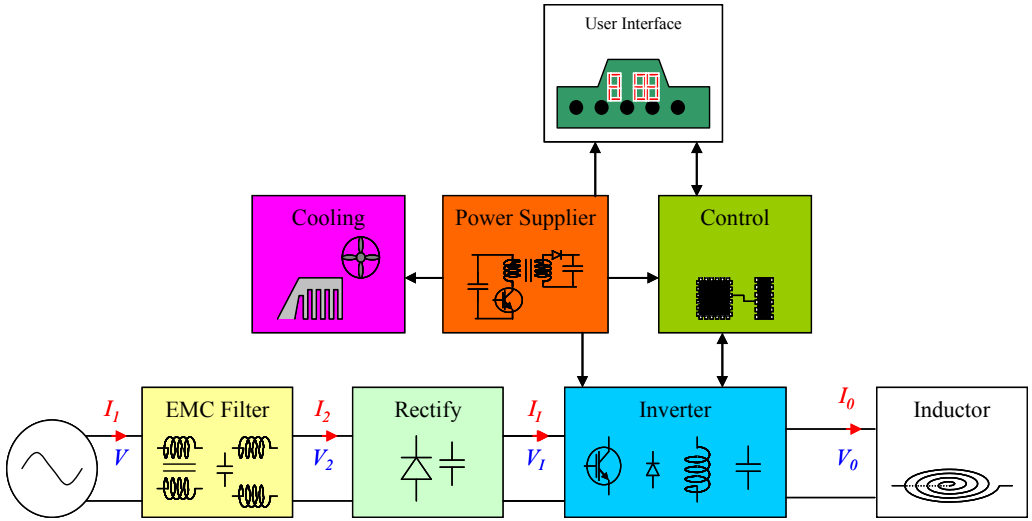
Domino	1 main elin
2I 60 cm	1 main elin
4I 60cm	1 main elin / 1 secondary elin
4I 70 cm	1 main elin / 1 secondary elin
4I 80cm	1 main elin / 1 secondary elin
3I	1 main elin / 1 secondary elin
5I 90cm	2 main elin / 1 secondary elin

3.1.1 ELIN with own power supply (“left Elin”)



3.1.1.1 Components of Elin with own power supply

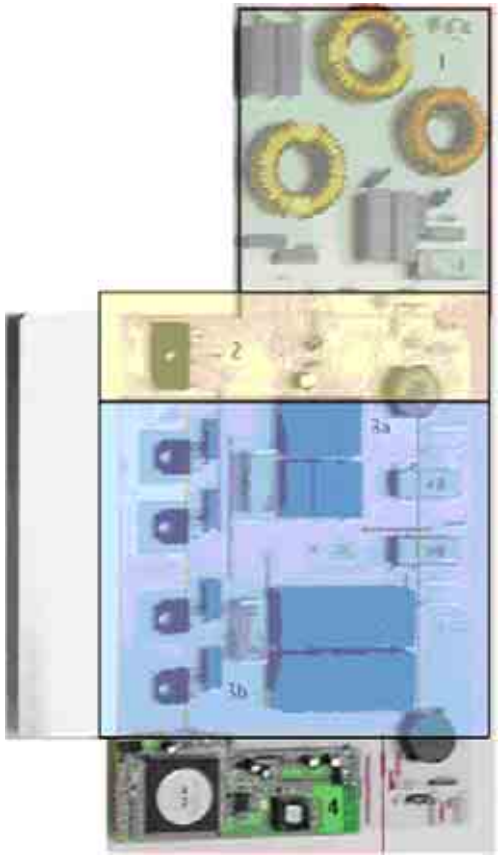




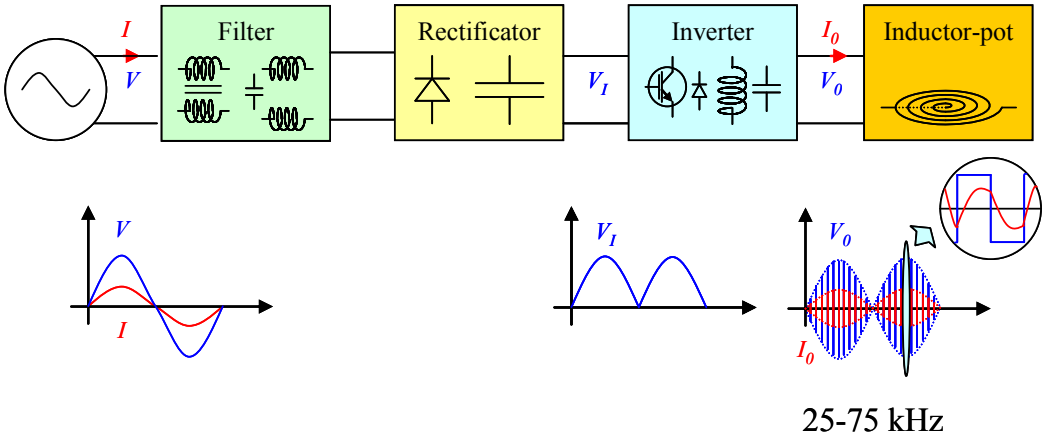
1- Interference filter (yellow)
2- Power supply (red)
3- Rectificator (light green)
4- Power inverter (blue)
5- Control (green)
6- Cooling element (pink)

3.1.2 ELIN without own power supply (“right ELIN”)

3.1.2.1 Components of elin without own power supply



1- Interference filter (light green)
2- Rectificator (light yellow)
3- Power inverter (blue)
4- Control (green, bottom part)
5- Cooling element (left grey)



3.1.3 ELIN functions

3.1.3.1 Power supply

Elins with their own power supply power the various components of the induction hob (fan, touchControl, elin without its own power supply, etc...)

3.1.3.2 Regulation

The elin regulates the power of the inductors by means of the IGBTs (insulated-gate bipolar transistors) and coordinates the signals given by the user through the control panel with the various induction zones.

3.1.3.3 Communication

- The elin returns the state of the burner.
  For example, if the pan is not detected, the power selected starts flashing (See pan recognition)
- It indicates the warnings and errors sent by the elin (See errors and warnings)
- It communicates with the touchControl by means of the 4-cable LIn connector.

3.2 Bosch TouchControl

3.2.1 Bosch dominos

3.2.1.1 Control knobs YL-167

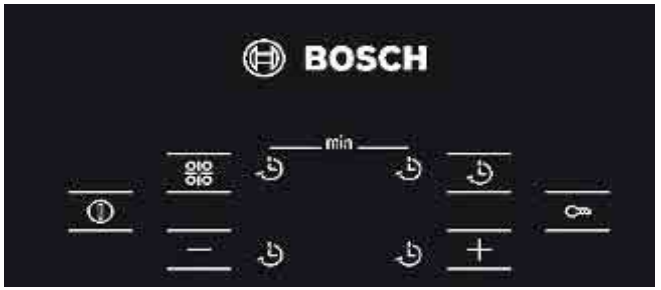
- **Control knobs**
- 9 power levels
- Powerboost function
- “On/Off” sensor

3.2.1.2 Precise TouchControl YL-199

- **Precise TouchControl**
- One sensor for each level – intuitive direct access to each level
- 9 power levels
- Direct switch off for each cooking zone
- Powerboost function with separate sensor
- “On/Off” sensor
- Timer function
- Residual heat indicator H/h
- Power Management

3.2.2 Bosch 60 / 70 / 80 / 90 cm

3.2.2.1 TouchControl Superquattro (SQ) YL-196



- One +/- Sensor for each cooking zone
- 17 power levels
- Powerboost function after level 9
- “On/Off” sensor
- Timer function depending on model
- Residual heat indicator H/h
- Power management
- Child lock

3.2.2.2 +/ - TouchControl Sensor YL-202

- +/- Sensors for each cooking zone
- 17 power levels
- Powerboost function after level 9
- Sensor “On”
- Timer function depending on model
- Residual heat indicator H/h
- Power management
- Child lock

3.2.2.3 PreciseTouchControl 60 / 70 / 80 / 90 cm YL-180

- One sensor for each level – intuitive direct access to each level
- 17 power levels
- Direct switch off for each cooking zone
- Powerboost function with separate sensor
- “On/Off” sensor
- Timer function
- ***Frying sensor depending on model with 4 levels (low-min-med-max)***
- ***9 Frying sensor programs***
- ***Cooking sensor depending on model with 5 levels.***
- ***9 Cooking sensor programs***
- Residual heat indicator H/h
- Power management

- Child lock
- Key lock

3.2.2.4 Semi-preciseTouchControl 60 / 70 / 80 / 90 cm YL-180

- One sensor for each level and one +/- for each intermediate level
- 17 power levels
- Direct switch off for each cooking zone
- Powerboost function with separate sensor
- “On/Off” sensor
- Timer function
- ***Frying sensor depending on model with 4 levels (low-min-med-max)***
- ***9 Frying sensor programs***
- Residual heat indicator H/h
- Power management
- Child lock
- Key lock

3.2.2.5 Metal Touch Control (Precise) YL-205

- One sensor for each level – intuitive direct access to each level
- 17 power levels
- Direct switch off for each cooking zone
- Powerboost function with separate sensor
- “On/Off” sensor
- Timer function
- ***Frying sensor depending on model with 4 levels (low- min-med-max)***
- ***9 Frying sensor programs***
- ***Cooking sensor depending on model with 5 levels.***
- ***9 Cooking sensor programs***
- Residual heat indicator H/h
- Power management
- Child lock
- Key lock

3.3 Siemens TouchControls

3.3.1 Siemens dominos

3.3.1.1 Control knobs YL-167

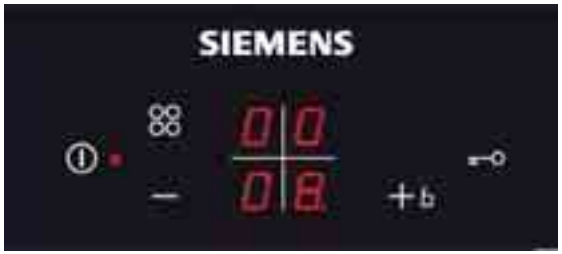
- **Control knobs**
- 9 power levels
- Powerboost function
- “On/Off” sensor

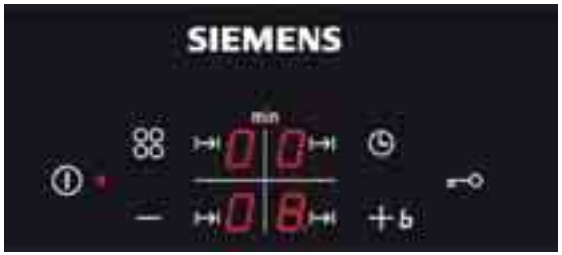
3.3.1.2 TouchControl Slider YL-207

- TouchControl Slider – intuitive direct access to each level
- 17 power levels
- Direct switch off for each cooking zone
- Powerboost function
- “On/Off” sensor
- Timer function
- Residual heat indicator H/h
- Power Management

3.3.2 60 / 70 / 80 / 90 cm Siemens

3.3.2.1 TouchControl Superquattro (SQ) YL-196

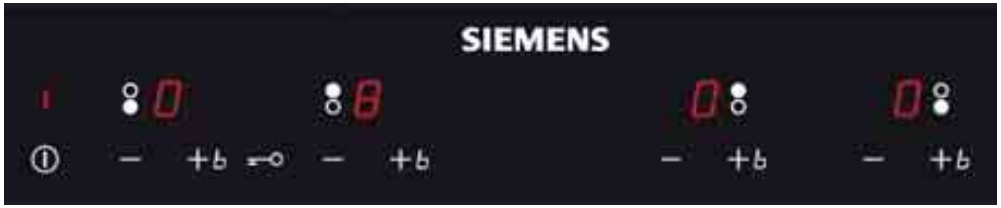




- One +/- sensor for all cooking zones
- 17 power levels

- Powerboost function after level 9
- “On/Off” sensor
- Timer function depending on model
- Residual heat indicator H/h
- Power management
- Child lock

3.3.2.2 +/ - TouchControl Sensor **YL-202**



- +/- Sensors for each cooking zone
- 17 power levels
- Powerboost function after level 9
- “On” Sensor
- Timer function depending on model
- Residual heat indicator H/h
- Power management
- Child lock

3.3.2.3 TouchControl Slider **60 / 70 / 80 / 90 cm YL-190**

- TouchControl Slider – intuitive direct access to each level
- 17 levels of power
- Direct switch off for each cooking zone
- Powerboost function
- “On/Off” sensor
- Timer function
- Residual heat indicator H/h
- Power Management
- ***Frying sensor depending on model with 4 levels (low-min-med-max)***
- ***9 Frying sensor programs***
- ***Cooking sensor depending on model with 5 levels.***
- ***9 Cooking sensor programs***
- Residual heat indicator H/h
- Power management
- Child lock
- Key lock

3.3.2.4 TouchControl multislider **60 / 70 / 80 / 90 cm YL-169/-170**

- One Slider touch control for each cooking zone – intuitive direct access to each level
- 17 power levels
- Direct switch off for each cooking zone
- Powerboost function
- “On/Off” sensor
- Timer and Egg timer function, one sensor for each cooking zone
- Residual heat indicator H/h
- Keep Warm function
- Power management
- Child lock
- Key lock

3.3.2.5 Metal TouchControl (slider) **YL-204**

- One sensor for each level – intuitive direct access to each level
- 17 power levels
- Direct switch off for each cooking zone
- Powerboost function with separate sensor
- “On/Off” sensor
- Timer and Egg timer function
- ***Frying sensor function depending on model with 4 levels (low-min-med-max)***
- ***9 Frying sensor programs***
- ***Cooking sensor function depending on model with 5 levels.***
- ***9 Cooking sensor programs***
- Residual heat indicator H/h
- Power management
- Child lock
- Key lock

3.4 Neff TouchControl

3.4.1 Neff dominos

3.4.1.1 TouchControl YL-199

- One +/- Sensor for each cooking zone
- 9 power levels
- Powerboost function after level 9
- Powerboost function with separate sensor “P”
- “On/Off” sensor
- Residual heat indicator H/h
- Child lock
- Cleaning protection
- Power management

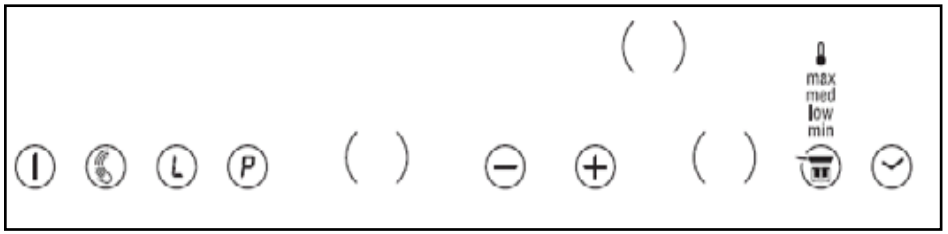
3.4.1.2 With controls

The control is oval and just as those of the oven.

3.4.2 60 / 70 / 80 / 90 cm Neff

3.4.2.1 TouchControl Digiselect YL-188

- One +/- Sensor for all cooking zones
- 9 power levels
- Powerboost function after level 9
- Powerboost function with separate sensor “P”
- “On/Off” sensor
- Power management
- Timer function depending of the variant
- Residual heat indicator H/h
- Child Lock or Keep Warm function “L”
- Cleaning protection
- Keep Warm function for each cooking zone



With Frying Sensor function

3.4.2.2 TouchControl metalTouch YL-206

- One +/- Sensor for all cooking zones
- 9 power levels
- Powerboost function after level 9
- Powerboost function with separate sensor “P”
- Timer function depending of the variant
- Residual heat indicator H/h
- Child Lock or Keep Warm function “L”
- Cleaning protection
- Keep Warm function for each cooking zone
- Power management

The sensors are integrated in a metallic profile.

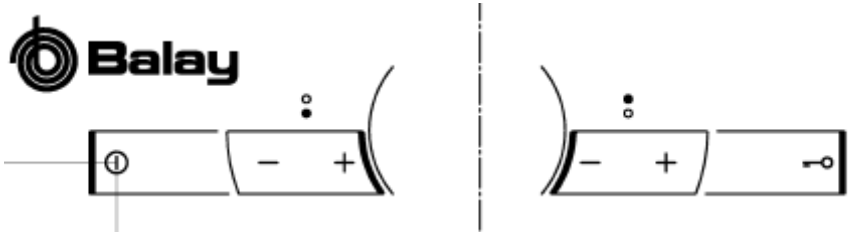
3.4.2.3 Touch Control Tippad YL-189

- A only central control device
- Powerboost function after level 9
- Powerboost function with separate sensor “P”
- “On/Off” sensor
- Timer function
- Residual heat indicator H/h
- Power management
- Child Lock “L”
- Key Lock “L”
- Cleaning protection

3.5 Balay TouchControl

3.5.1 Balay dominos

3.5.1.1 TouchControl YL-213



- One +/- sensor for each cooking zone
- 9 power levels
- Powerboost function after level 9
- Powerboost function with separate sensor
- “On/Off” sensor
- Residual heat indicators H/h
- Child lock

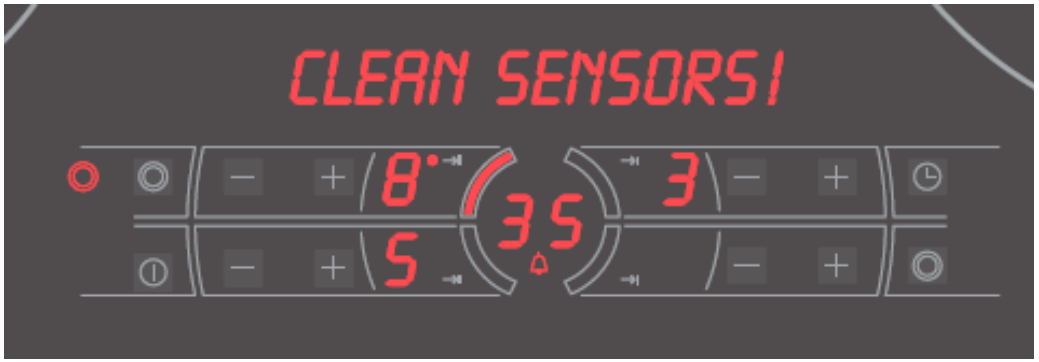
3.5.2 Balay 60 / 70 / 80 / 90 cm

3.5.2.1 TouchControl Superquattro (SQ) YL-196

- One +/- sensor for each cooking zone
- 9 power levels
- Powerboost function after level 9
- “On/Off” sensor
- Timer function depending on model
- Residual heat indicator H/h
- Child lock

3.5.2.2 TouchControl Básico+ línea de texto YL-197

It has been cancelled.



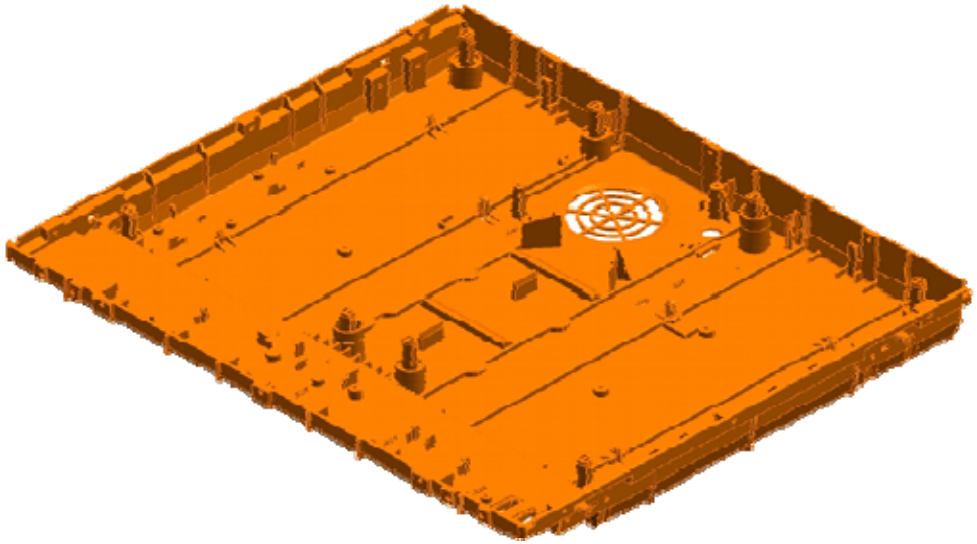
- +/- sensors for each cooking zone
- 9 power levels
- Powerboost function after level 9
- “On” sensor
- Timer function depending on model
- Residual heat indicator H/h
- Power management
- Child lock
-

3.5.2.3 Touch Control Metal Balay

- +/- sensors for each cooking zone
- 9 power levels
- Powerboost function after level 9
- “On/Off” sensor
- Timer function
- ***Frying sensor depending on model with 4 levels (low- min- med-max)***
- ***9 Frying sensor programs***
- Residual heat indicator H/h
- Power management
- Child lock
- Key lock

3.6 ELIN support

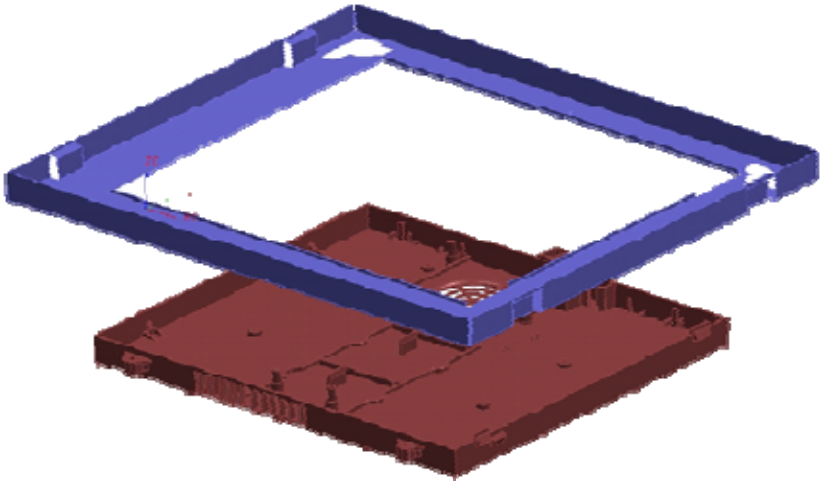
In IH4 (previous project) there was a plastic support without a metal frame.



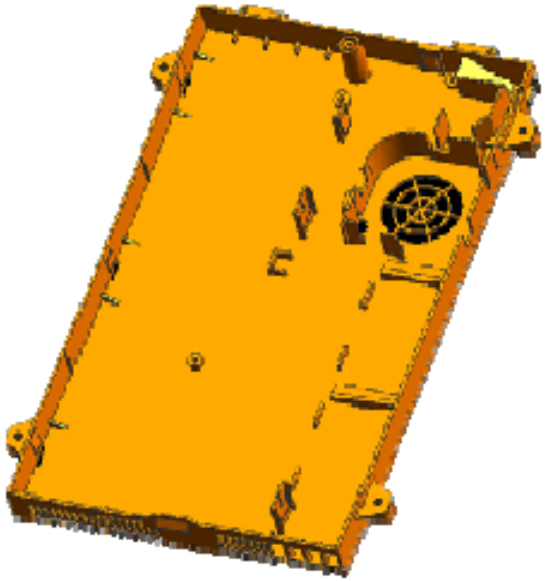
In the new IH5 project there are two types of support:

- ELIN support 1
- ELIN support 2
- Along with a metal frame, which makes it possible to insert the turrets for the cooking sensor and two more relay modules.

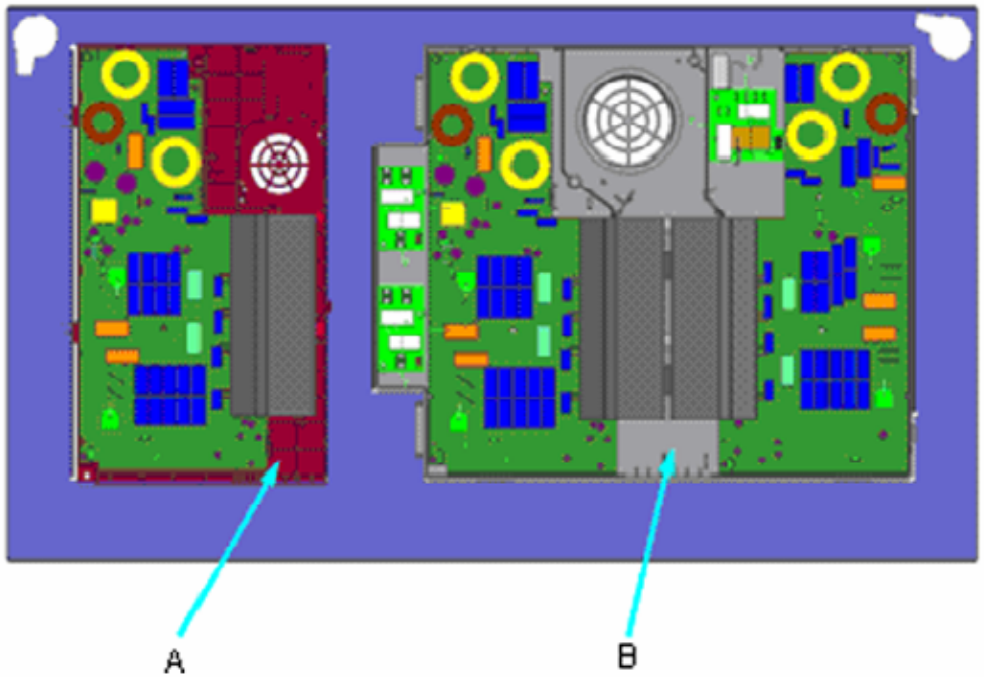
3.6.1 ELIN support 2 for 60-70 cm hobs



3.6.2 ELIN support 1 for dominos and combinations



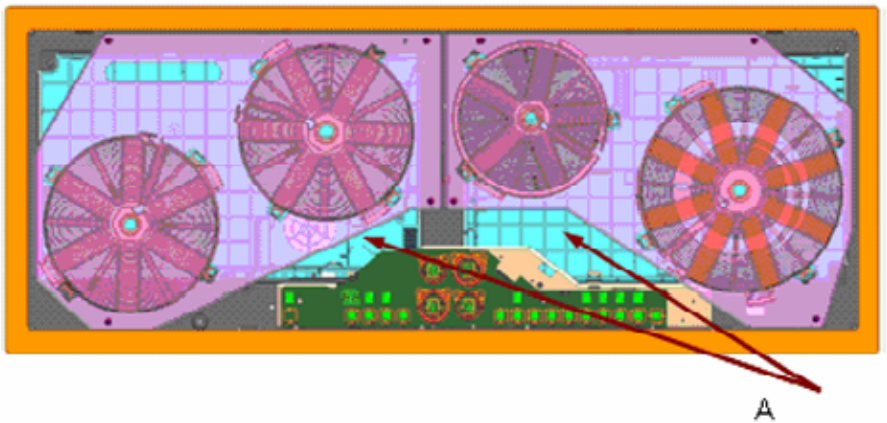
3.6.3 90cm hob



A- ELIN support 1

B- ELIN support 2

3.6.4 90*35 cm panoramic hob



A- ELIN support 1

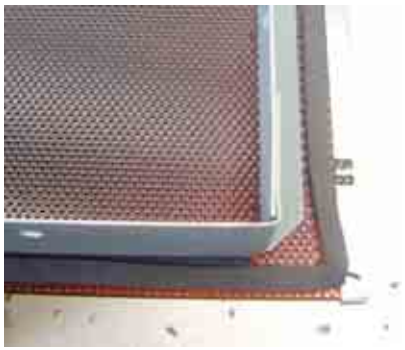
3.7 Glass frame

3.7.1 Characteristics

The inner framework of the glass frame units consists of 4 frames stuck together.

This design improves the tension that might be created.

The hermetic seal has been replaced by foam, which is fitted by robot.



Old seal

New seal = foam

There are greater advantages to be obtained with foam as opposed to using the hermetic seal:

- Automatically constant thickness
- Site of application is controlled
- Average flatness is reduced by 0.2 mm.

3.7.2 Types

We have different sizes and styles for glass frame units.

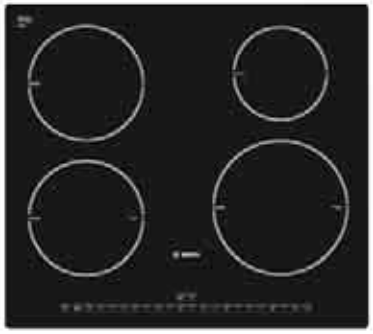
Sizes:

30 cm; 40 cm; 60 cm; 70 cm; 80 cm and 90 cm.

Styles

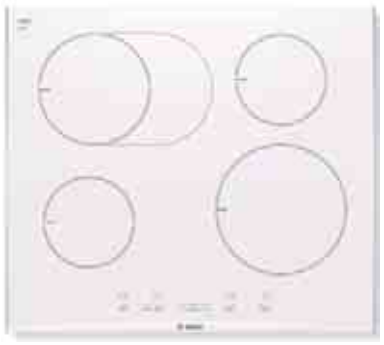
The various styles differ with respect to outer trim, colour of the glass and / or type of mounting, apart from the way the model can be recognised.

Black vitroceramic glass



Metal look vitroceramic glass

White vitroceramic glass



3.7.3 Markings on glass

In the models for Balay and Lynx there is a label at the top on the right with the complete model without KI printed on it.

The other models only have the supplier's number, at the top on the left, enabling us to find out what model it is.

This number is not easy to see. See photo below.

3.7.4 Replacing glass frame for basic units

Warning!

The basic units have trim all around the edge of the glass.

Until recently, the outer metallic trim was completely stuck to the glass with silicon.

Now, although they will be supplied together, they will not be stuck with silicon but with foam, which only keeps the trim in place.

Thus, special care should be taken when handling the replacement glass frame, since it might fall and cause injury should the glass fall on top of us.

All replacement glass frames will be supplied like this. However, they will have a sticker to remind the people handling them, printed with the following warning:

3.8 Fan

3.8.1 Characteristics and assembly

The fan used operates on direct current (without dynamo brushes) and contains electronic components.

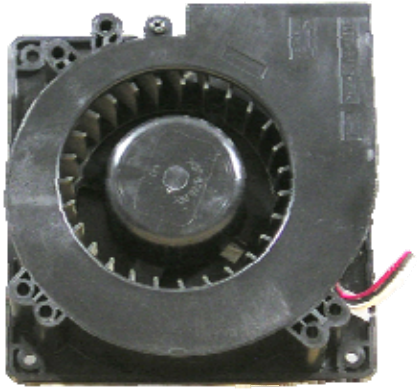
It is connected to the ELIN plate by means of a 3-wire connection with some of the ends soldered to the fan's circuit board

+24V

GND = earth

TACHO = tachograph

It is attached by means of clips (dominos and 2l). In other models it is attached to a bracket, which is screwed into place.



1.1.2 Function

To cool the electronic components.

Warning!

Between the content of the housing and the entrance of the fan there should be a gap of at least 2 cm.

Do not keep small objects and papers in the box, since these could be absorbed by the fan and reduce the cooling effect, or damage the fan.

3.9 NTC

3.9.1 Types

There are two types of NTCs.

- NTCs for the inductors.
- NTCs for the electronic module (ELIN)

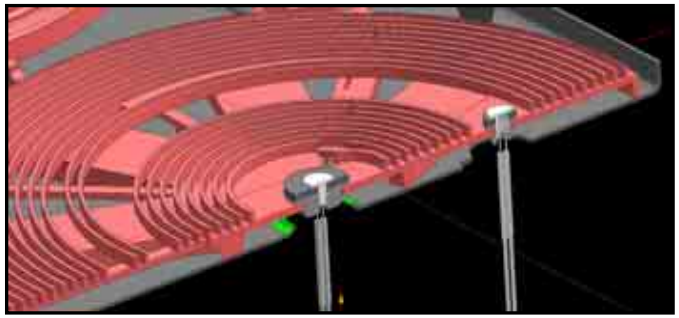


Photo of NTC and cross section of new IH5-I project

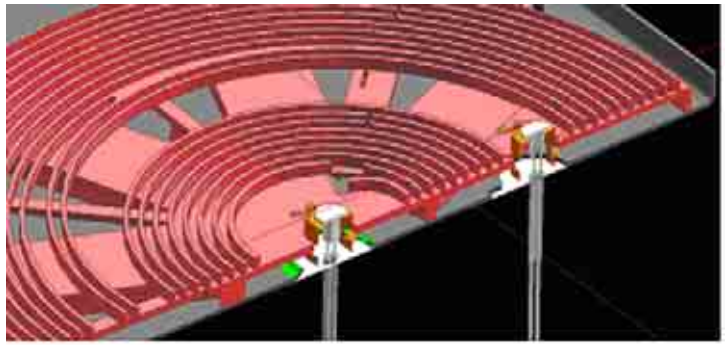
3.9.2 Characteristics and assembly

3.9.2.1 NTCs for the inductors

In both IH4-I (previous project) and IH5-I (current project) the NTCs measure the temperature directly on top of the glass.
The difference lies in the way the NTC is mounted in the inductor and the fact that they have polarity (i.e. 3 channels for the frying function NTC).
For mounting purposes, a silicon support bracket is used instead of a metal spring. This reduces the time taken to assemble the component.

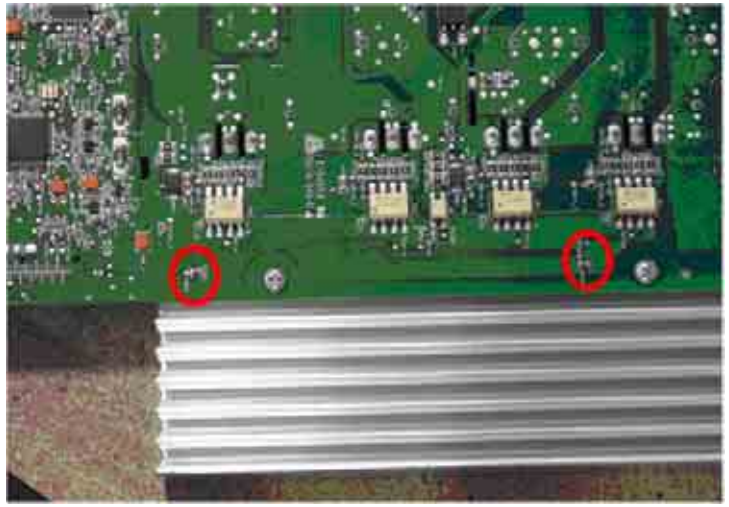
The external NTC has a 3-wire connector and controls the frying sensor function.
They are both interchangeable and have a different code number (internal 2-wire NTC connector and external 3-wire NTC connector) and can be supplied as spare parts.

IH4-I



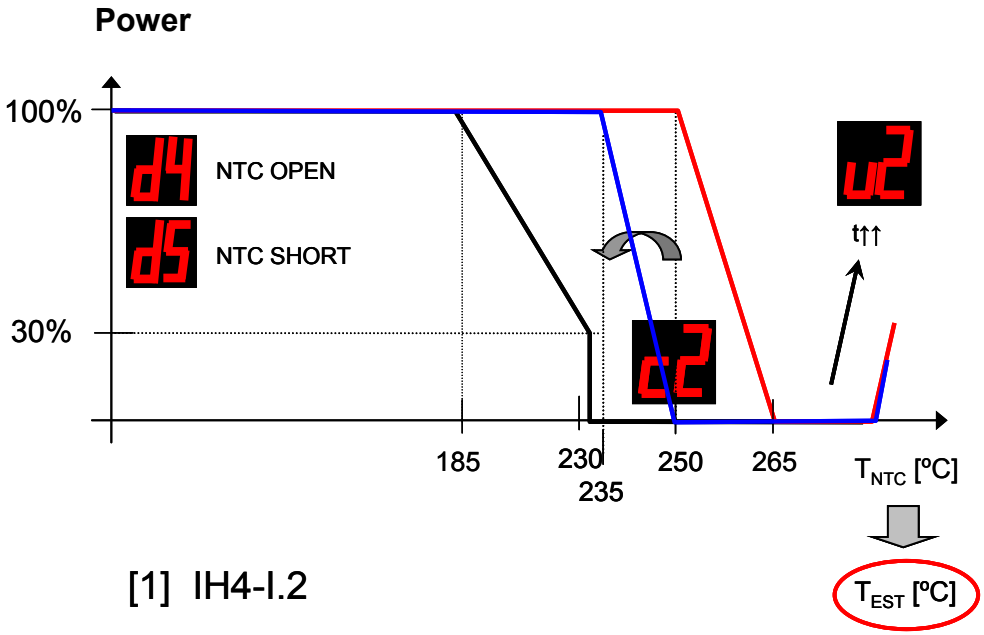
1.1.2.2 NTCs for induction module

These are two NTCs located behind the induction module, next to the bolts. They are not interchangeable.



1.1.2 Function of inductor NTCs

These measure the operating temperature for the inductors. If the temperature limits are exceeded, the power supply is cut off, with a warning being sent to the TouchControl panel. Once the NTCs have cooled down again, the power supply is renewed.



[1] IH4-I.2

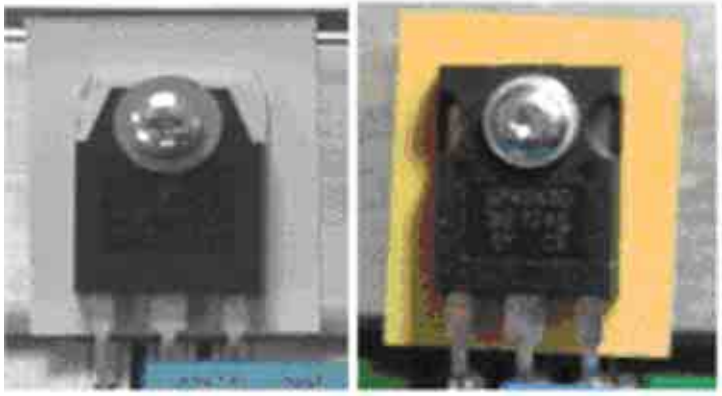
[2] IH5-I

[3] IH5-I critical modules

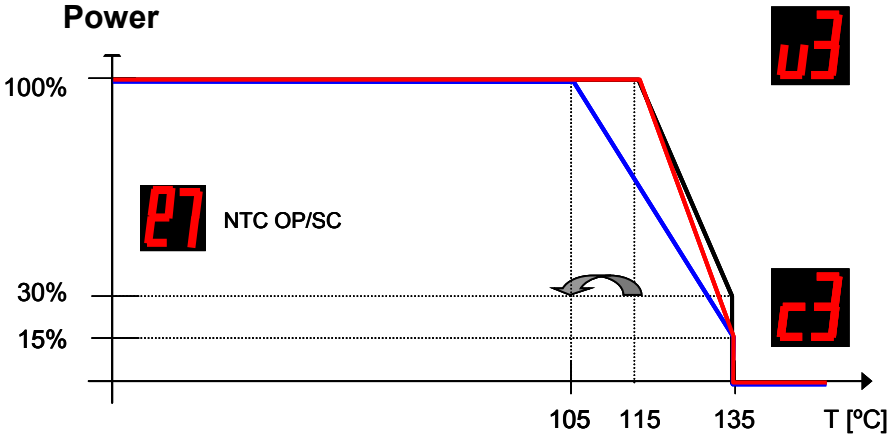
3.9.3 Function of NTCs for electronic module

These measure the temperature of the IGBTs (insulated-gate bipolar transistor, the element that supplies power to the electronic module) and cut off the power supply if they reach the maximum temperature.

IH4-I.2 IH5-I



IGBTs.



[1] IH4-I.2

[2] IH5-I

[3] IH5-I critical modules

3.10 Inductors

3.10.1 Characteristics, types and assembly

Type	name
145 mm	
180 mm	
180 mm ***180x280 mm***	Bräter
210 mm	
180 mm ***280 mm***	28cm double
280 mm	
210 mm ***260 mm*** ***320 mm***	Triple 32 cm (NEW for IH5-I)

The 145,180 and 210 mm inductors have been changed, to include the function of frying and to improve the efficiency, heat distribution and recipient detection. (Before, there was only frying in the 210mm inductor).

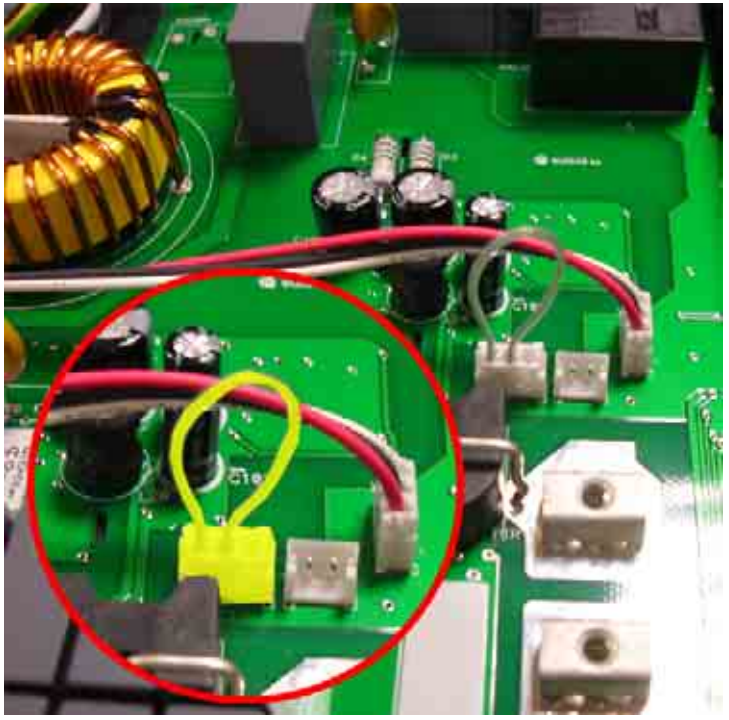
In the **frying models**, the 180 and 210 inductors have a second NTC (3-way connector). In the case of the 145mm inductor it is necessary to insert into the ELIN a short-circuited 3-way connector (a type of jumper with its own code).

Warning!

When changing the part of the ELIN of the 145mm inductor with frying function, the jumper of the original part should be taken and installed in the new ELIN.

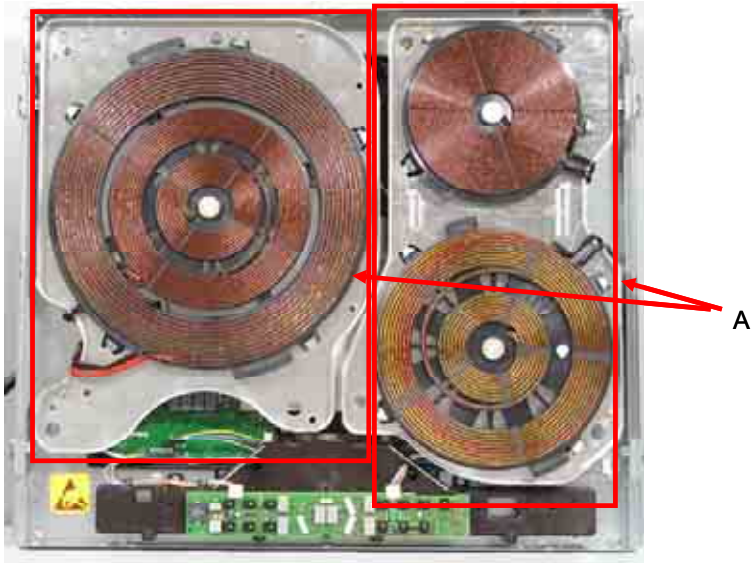
If we do not install the jumper, the frying will not operate.

Does not come with spare.



Mount upon the inductor assembly.

In case of damage, the complete assembly must be replaced.

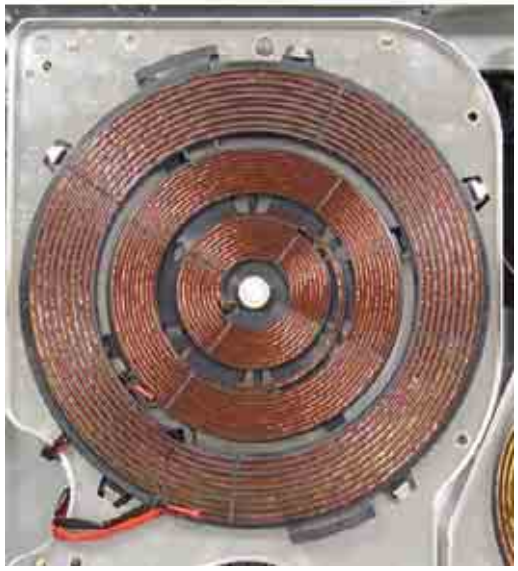


A- Inductor assembly

1.1.2 32 cm triple inductor (New feature IH5-I)

Made up of 3 rings: internal, middle and external.

Internal ring = 210mm
Middle ring = 260mm
External ring= 320mm



3.10.1.1 Power table in Watts.

Power/diameter	210 mm	260 mm	320 mm
P Standard	2200	2600	3300
P booster	3300	3400	3600
P Superbooster	-	-	4600

In order to activate the superbooster of the triple inductor, an auxiliary plate is needed. See relay plate.
The superbooster can only be activated on the external ring.

3.10.2 28 cm Double Inductor

The auxiliary plate of the double inductor in order to activate the superbooster has been integrated into the ELIN, simplifying the connection diagram.

3.10.2.1 Power table in Watts

Power/diameter	180 mm	280 mm
P Standard	1800	2800
P booster	2500	3000
P Superbooster	-	4400

3.10.3 Bräter Inductor

The auxiliary plate of the Bräter inductor in order to activate the booster has been integrated into the ELIN, simplifying the connection diagram.

3.10.3.1 Power table in Watts

Power/diameter	180 mm	280 mm
P Standard	1800	2000
P booster	2500	2600
P Superbooster	-	-

3.10.3 Double, triple or Bräter cooking zones

These zones can recognize recipients of different sizes. Depending on the material and the properties of the recipient, the zone will adapt automatically; either only the simple zone or its entirety and supplying the adequate power to obtain good cooking results.
There is no light indicator indicating how many rings are active. Even if the external ring is not active, the internal ring can supply more power than if the external one were active.

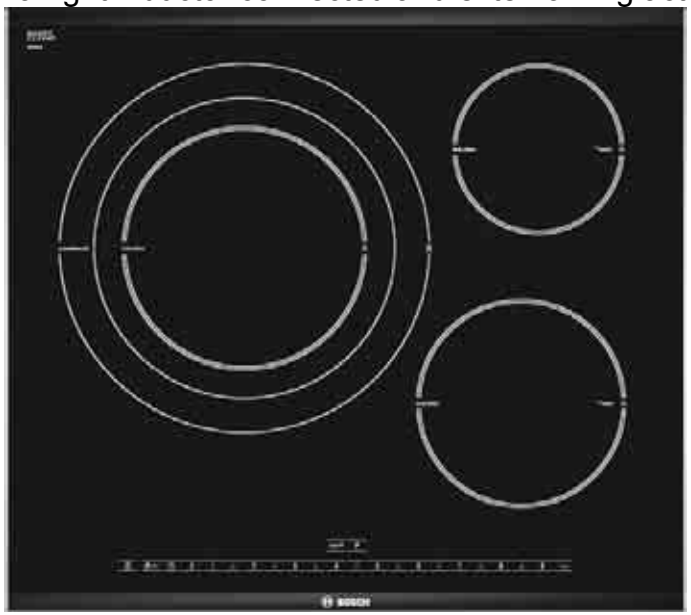
Warning!

The double, triple and Bräter (multiples) inductors have **polarity**, that is, the connection of its elements cannot be inverted.
If this is not taken into account, the detection of the recipient could fail and if the ring were activated or the auxiliary element the correct power will not be supplied. For this reason, the cables of the inductor are of a different colour.

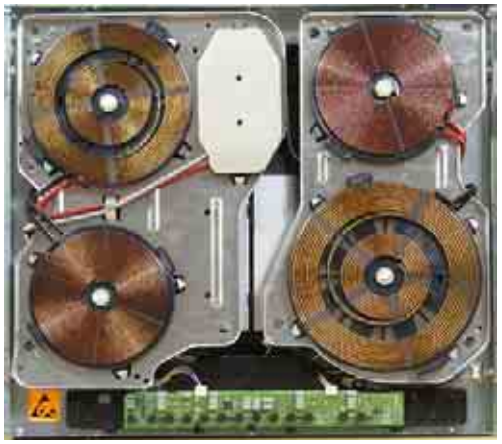
3.10.4 Booster in multiple inductors

The booster is always possible. A b appears on the display, but the power depends on the elements which are active.
The detection of the number of active rings is not indicated with any light signal.
The superbooster can only be activated in the external ring.
For example:

4.6 kW inductors on the right disconnected and external ring active
3.6 kW a right inductor connected and external ring active



3.10.5 Booster in Bräter



For IH5-I the Bräter has a booster power of 2.6 kW (2 kW of nameplate power) when the left front inductor is turned off.

For IH4-I (Ind IV) there was no booster and the nameplate power was of 2.6 kw.

The detection of the Bräter is not indicated on the touchControl.

3.10.6 Powers table level 9, booster and superbooster

	Level 9	PowerBoost	SuperBoost	
145 mm	1.400 W	1.800 W (+28%)		New
180 mm	1.800 W	2.500 W (+38%)		New
180 mm	1.800 W	2.500 W (+38%)		
180x280 mm	2.000 W	2.600 W (+30%)		
210 mm	2.200 W	3.300 W (+50%)		New
180 mm	1.800 W	2.500 W (+38%)		
280 mm	2.800 W	From 3.600 W (+21%)	to 4.400 W (+57%)	
280 mm	2.400 W	3.600 W (+50%)		
210 mm	2.200 W	3.300 W (+50%)		New
260 mm	2.600 W	3.400 W (+11%)		
320 mm	3.300 W	From 3.600 W (+9%)	to 4.600 W (+28%)	

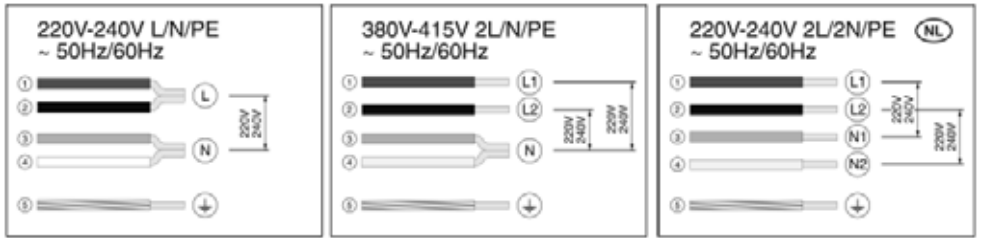
3.11 Connections

3.11.1 Input feed connection

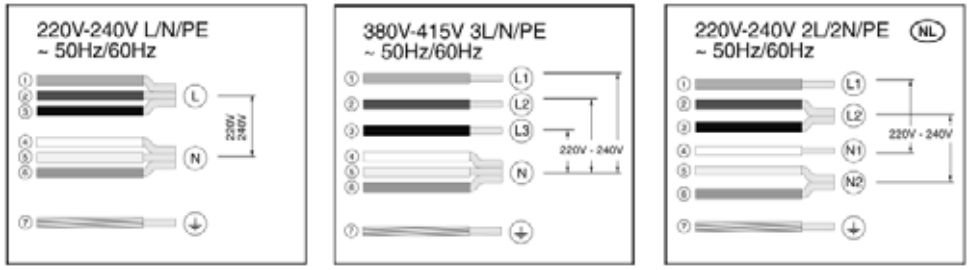
There is a valid input connection for all the electrical configurations and installations throughout Europe.

3.11.1.1 Domino Connection (1 Module)

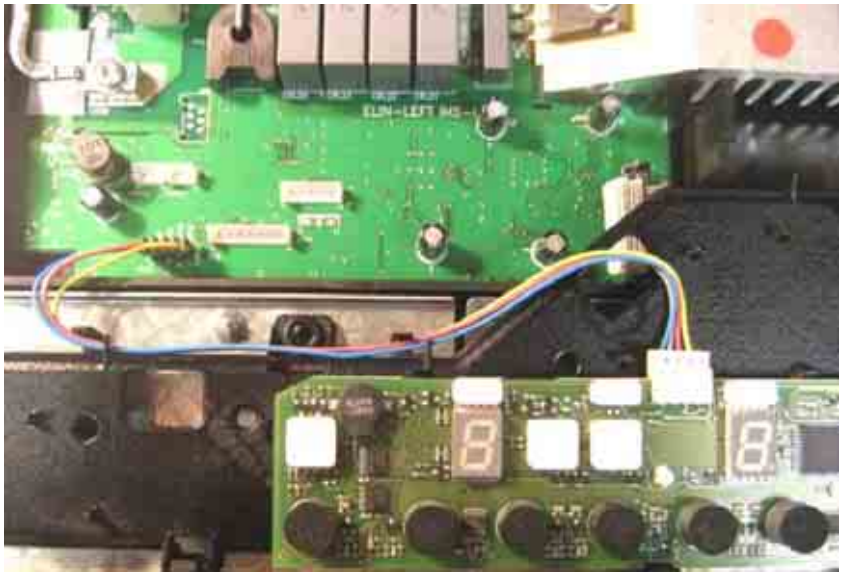
3.11.1.2 60 cm, 70 cm and 80 cm Connection (2 modules)



3.11.1.3 90 cm Connection (3 modules)



3.11.2 Touch Control feed connection



The 4-wire connector between the ELIN and Touch Control is the one which feeds Touch Control.

3.11.3 Jumper connector for 15 cm frying sensor

In order for the frying sensor function of this 15 cm inductor to work it is necessary to connect this jumper; if not, the frying sensor function is not activated.

For the rest of the inductors with frying it is not necessary, because we connect the 3-way NTC, which controls the frying and activates the function.

3.11.4 Connection of the Cooking Sensor

The outer part must be positioned to prevent excessive overheating.

Example of bad positioning Example of good positioning

3.11.4.1 Domino (1 fan)

3.11.4.2 2l (fan)

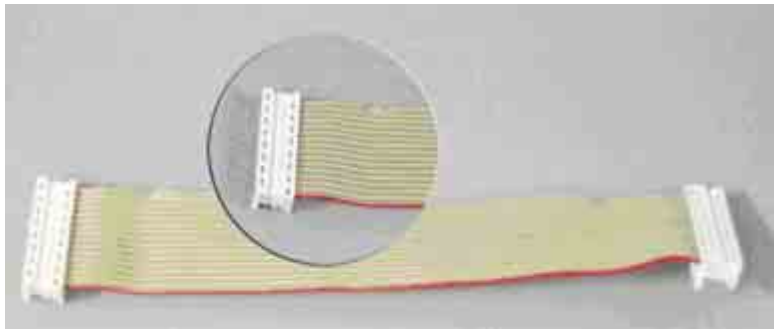
The fan connection is guided through the white support and the connector of the relay plate goes behind the condensers.

3.11.4.3 60 cm, 70 cm and 80 cm (1 fan)

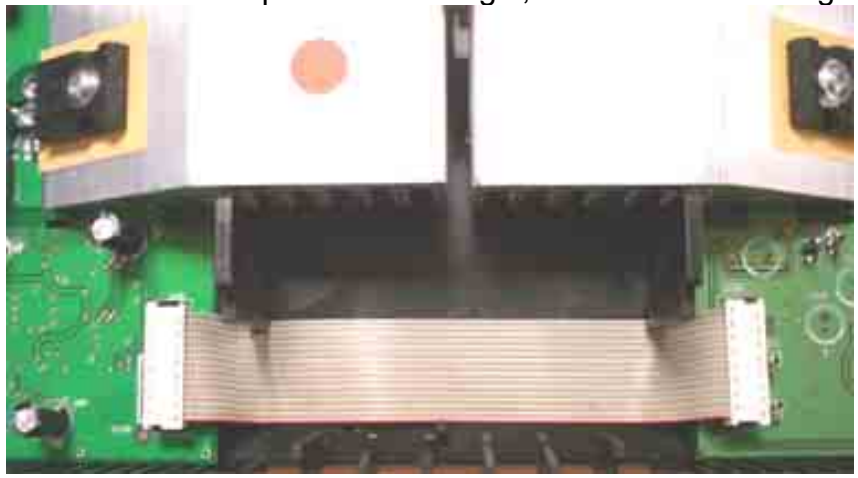
3.11.4.4 90 cm (2 fans)

3.11.5 Connection between ELINS

3.11.5.1 3I, 5I: 16-way connector



This is a 16-way connector.
Care should be taken upon dismounting it, as it could be damaged.

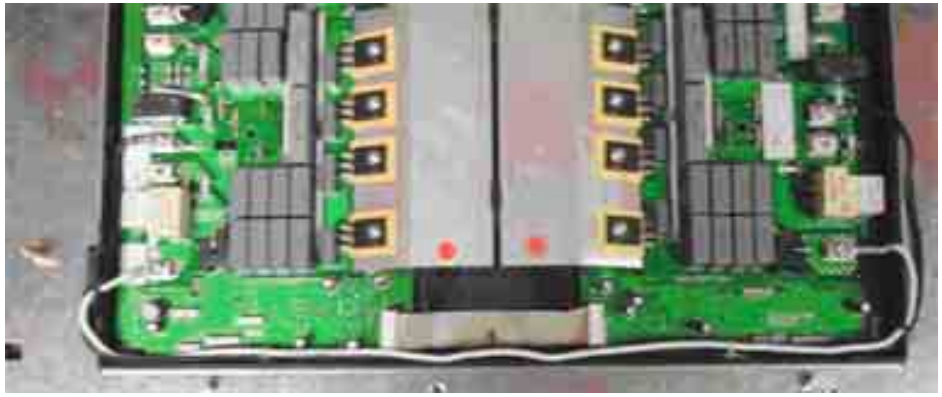


In case of bad connection, check the connector pins; they may be slightly bent.

3.11.5.2 Other models: 8-way connector

3.11.6 Superbooster Connection

This is the lower white connector.



3.12 Perfect Built in union accessory

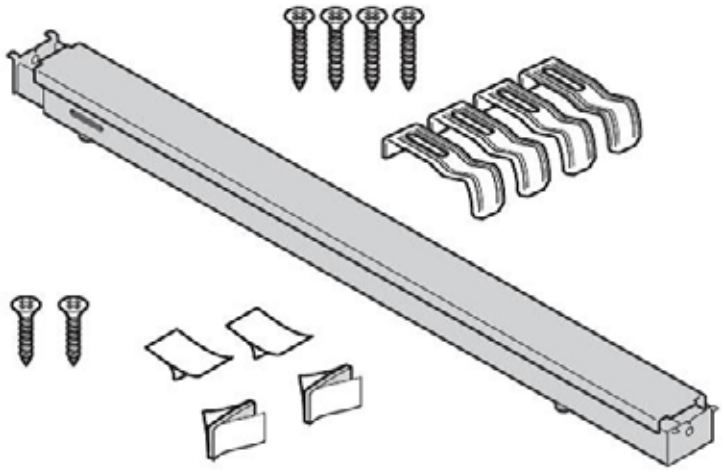
3.12.1 Union accessory components

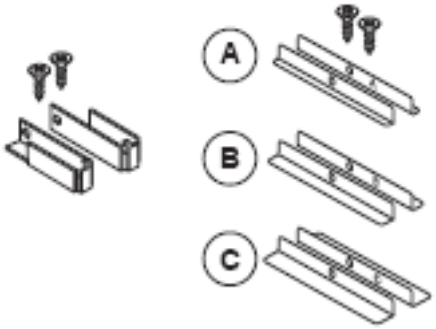
This accessory is for combining dominos with other types of counters so that they are totally level. .

Bosch HEZ394301

Siemens HZ394301

Neff Z9914X0





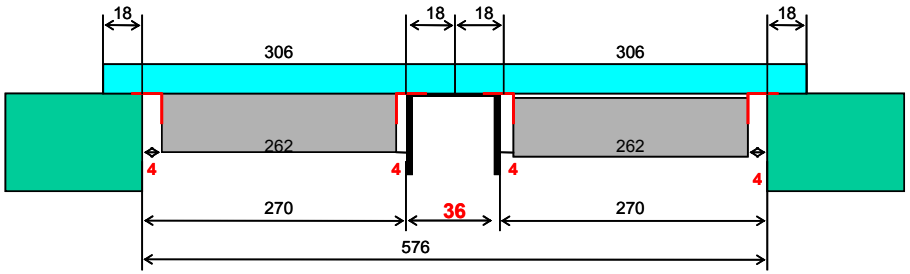
- Combination profile
- Some screws for fastening the profile in case of having a wood counter.
- Stickers in case of being granite or marble
- Some screws and metal pieces to fit the counter.
- Safety profiles (3 types: A, B , C and D)

Safety Angles	**SE**	**BO / NE**	**BA**
60 cm	B	B	
80 cm	C	A	
80 cm FTH	A	A	

1.1.1.1 Characteristics

The dimensions of the combination kits changes for each trademark.

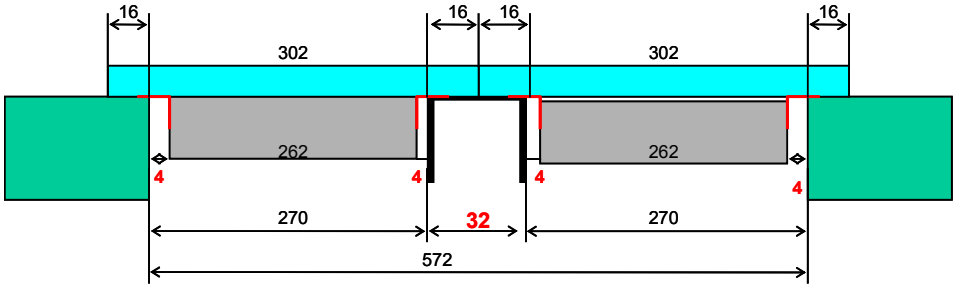
For Bosch and Neff



Domino width **306** mm

Accessory width **36** mm

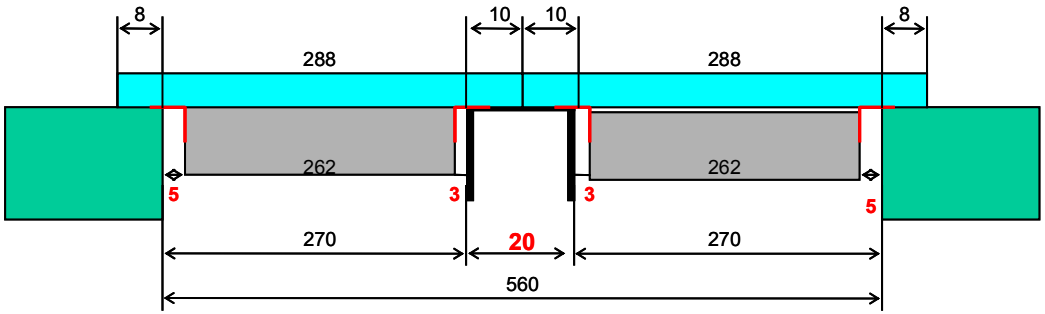
For Siemens:



Domino width 302 mm

Accessory width 32 mm

For Balay



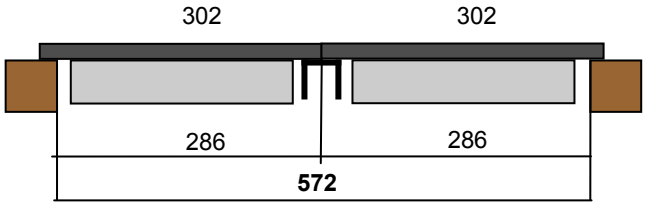
Domino width 288 mm

Accessory width 20 mm

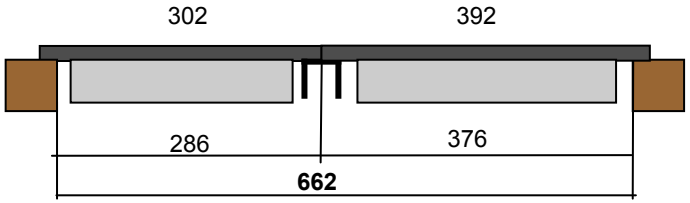
3.12.1.1 Possible fitting combinations and measurements

3.12.1.1.1 32 mm Kit

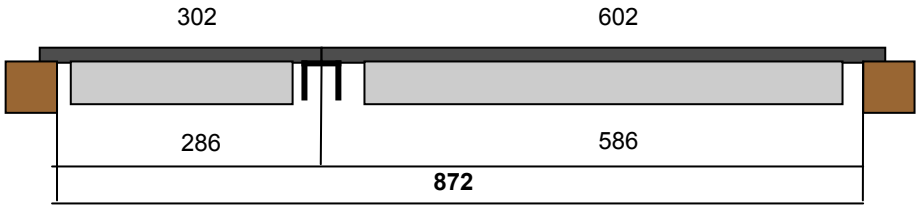
- 2 dominos



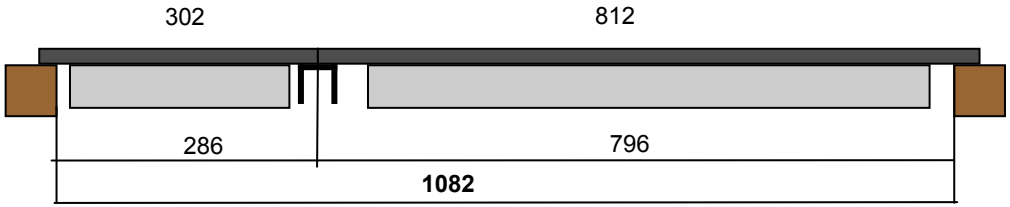
- Domino + domino 38 cm



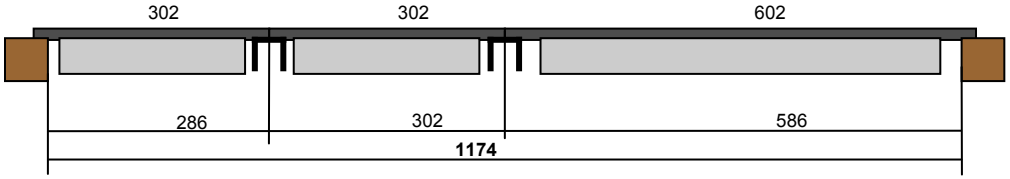
- Domino + 60 cm



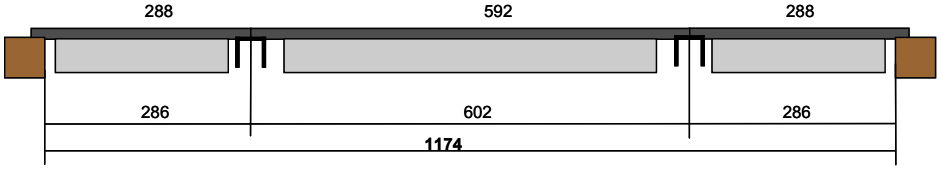
- Domino + 80 cm



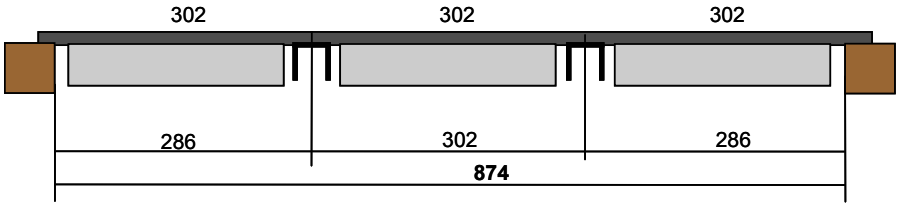
- Domino + domino + 60 cm



- Domino + 60 cm + domino

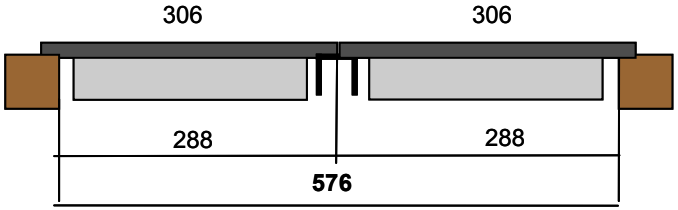


- 3 Dominos

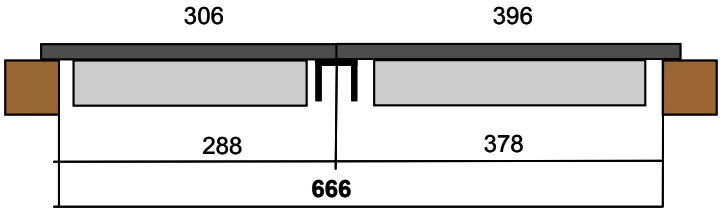


3.12.1.1.2 36 cm Kit

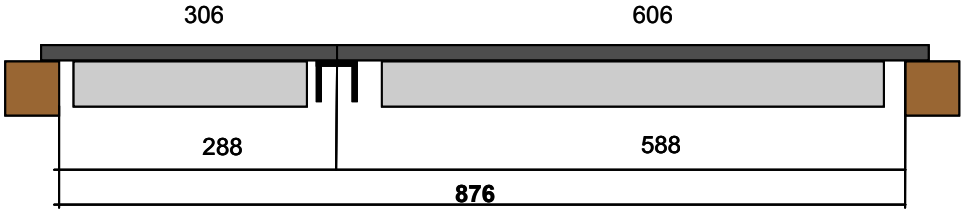
- 2 dominos



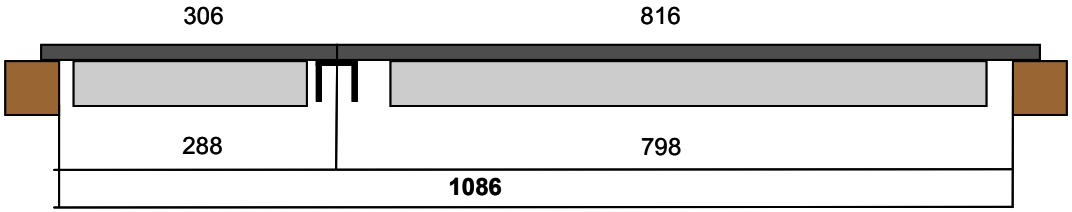
- Domino + domino 38 cm



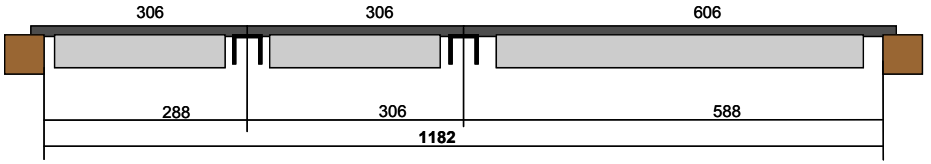
- Domino + 60 cm



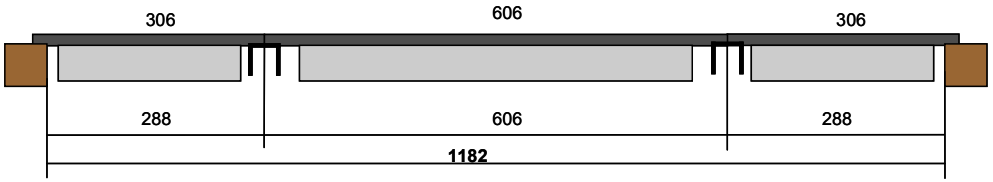
- Domino + 80 cm



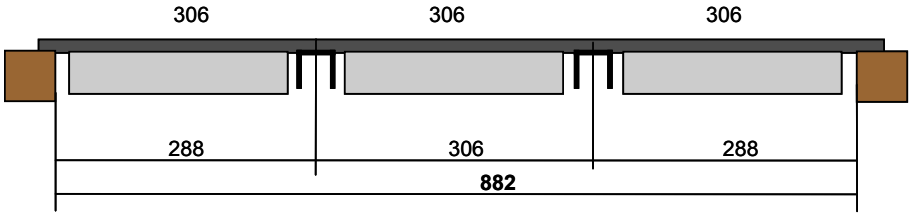
- Domino + domino + 60 cm



- Domino + 60 cm + domino



- 3 Dominos



4 FAULT DIAGNOSTICS

4.1 Error codes or warnings sent by the ELIN

There are 3 types of error messages or warnings that can be sent by the ELIN (induction electronics):

1- Warnings and safety cut-outs.

2- Fault detection concerning connections or elements external to the induction electronics (NTC not connected, fan…).

3- Faults with the induction electronics (ELIN) that require a replacement to be made.

Warning!

Before carrying out any type of repair to the equipment, first switch it off and then on again.

Should the fault not be resolved by switching the equipment off and on again, disconnect it from the mains supply, wait 20 seconds and reconnect it.

WARNINGS AND SAFETY CUT-OUTS: "Encoded with the letter U" The codes are listed below in decreasing order of priority. In the event of more than one, only the highest priority warning is displayed.				
Fault / Warning Code	**Fault / Warning**	**Cause**	**Solution**	**User Message**
U1	The input voltage is less than 150 V or greater than 275 V.	The input connection may be faulty.	1- Check the power input connection. 2- This error appears and disappears without action by the user, it is displayed without connecting power to coils and would disappear when the input voltage is within the established limits.	When this message is displayed, all coils are switched off. The message is displayed on all for coils if it is full induction and only on the induction coils if it is a 2i unit.
U2	The NTC on the induction unit is blocking operation.	The NTC is not heating up within the established limits according to the power supplied.	1- Check connections on the indicated induction module NTC. 2- If the connection is correct and the fault continues, replace the NTC.	
U3	The NTCs on the ELIN are blocking operation.	Excess temperature on the specific module.	Leave to cool and reset the hob.	
U4	The NTC on the cooking sensor is blocking operation.	Excess temperature on the cooking sensor module.	Leave to cool and replace cooking sensor if fault continues.	Perhaps a hot pot has been left near the cooking sensor.

Fault detection concerning connections or elements external to the induction electronics (NTC not connected, fan…)

: "Encoded with the letter d"

The codes are listed below in decreasing order of priority. In the event of having more than one, only the highest priority warning is displayed.

Fault / Warning Code	Fault / Warning	Cause	Solution	User Message
d0	Communication failure between the TouchControl and ELIN or between ELINs.^{oo}	The connections between the TouchControl and the ELIN or between ELINs may be faulty.	1- Check connection between the TouchControl and ELIN or between ELINs. 2- Replace connections.	
d1	ASIC communication failure between ELINs (Superbooster). Fault on the right module in superbooster models.	1- The 16 conductor cable between ELINs may be faulty. 2- The connector for the 16 conductor cable may have bent flaps.	1- Check the 16 conductor connection between ELINs. 2- If any of the flaps are bent, it is not necessary to replace the cable. It is enough to straighten the flaps and reconnect the 16 conductor cable.	
d2	Superbooster relay error.	The superbooster relay located in the ELIN has become damaged.	This error is common on the paella dish module, although it is possible that the relay not operating correctly is the one on the right or secondary ELIN.	
d3	Fan error.	The fan cables are badly connected or the fan has become damaged.	Check fan connection or replace the fan if it does not work.	
d4	The NTC on the induction unit is on an open circuit.	The NTC on an induction unit is not connected.	Check NTC connections.	

d5	The NTC on the induction unit is short circuiting.	The NTC on an induction unit has become damaged.	Replace NTC on the indicated induction unit.	
d6	The cooking sensor signal is on an open circuit.	The cooking sensor is not connected to the ELIN	Check cooking sensor connection.	
d7	The cooking sensor signal is short circuiting.	The cooking sensor has become damaged.	Replace cooking sensor.	

Warning!

The Superbooster fault on the triple-ring paella coil is not encoded. One symptom of this error is that low-level power is supplied.

The relay board is not included within the ELIN itself on the triple-ring paella coil. It will be necessary to check the relay module.

Faults with the induction electronics (ELIN) that require replacements to be made : "Encoded with the letter e" The codes are listed below in decreasing order of priority. In the event of having more than one, only the highest priority warning is displayed.				
Fault / Warning Code	**Fault / Warning**	**Cause**	**Solution**	**User Message**
e0	The input relay on the ELIN is faulty.	This error is displayed when it is attempted to close the relay by switching on a coil.	1- Switch off and on again to see if the fault is resolved. 2- Replace the ELIN that corresponds to the fault location.	This can be shown on the display if we supply power only to a specific burner. Instruct the user to switch off and on again and to reset the mains supply.
e1	Damaged ELIN measurement circuit.	The Vbus measurement circuit has become damaged.	1- Replace the ELIN that corresponds to the fault location.	Instruct the user to switch off and on again and to reset the mains supply.
e2	Main synchronisation signal error.	The synchronisation signal is faulty.	1- Replace the ELIN that corresponds to the fault location.	Instruct the user to switch off and on again and to reset the mains supply.
e3	Software security error.	It may be a sporadic fault and caused by an internal microcontroller fault.	1- Switch off and on again to see if the fault is resolved. Reset and if not; 2- Replace the ELIN that corresponds to the fault location.	Instruct the user to switch off and on again and to reset the mains supply.
e4	ASIC communication error within the ELIN itself.	ASIC communication has become damaged.	1- Replace the ELIN that corresponds to the fault location.	Instruct the user to switch off and on again and to reset the mains supply.

e5	Configuration relay error on every induction unit.	They may have become stuck together or been damaged when activating the induction coil.	1- Switch off and on again to see if the fault is resolved. Reset and if not; 2- Replace the ELIN that corresponds to the fault location.	Instruct the user to switch off and on again and to reset the mains supply. This is only displayed if the burner is activated.
e6	IGBT inverter error.	The IGBTs have become damaged or the connection on the induction units may be faulty.	1- Check the connection on the induction units. 2- Replace the ELIN that corresponds to the fault location.	Instruct the user to switch off and on again and to reset the mains supply.
e7	NTC on the ELIN short circuiting or on an open circuit.	NTC short or open circuit.	1- Replace the ELIN that corresponds to the fault location.	Instruct the user to switch off and on again and to reset the mains supply.
e8	The power measurement circuit has become damaged.	The power measurement is incorrect.	1- Replace the ELIN that corresponds to the fault location.	Instruct the user to switch off and on again and to reset the mains supply.

4.2 Error codes or warnings sent by the TouchControl

Warning!

Before carrying out any type of repair to the equipment, first switch it off and then on again.

Should the warning display remain after having switching the equipment off and on again, disconnect it from the mains supply, wait 20 seconds and reconnect it.

Internal TouchControl faults: "Encoded with the letters ErXY" The XY correspond to specific error numbers. Below is a list of the most common errors. It is not a comprehensive list.				
Fault / Warning Code	**Fault / Warning**	**Cause**	**Solution**	**User Message**
Er32	Internal TouchControl error.	Spare parts confusion or a 4i module has been installed instead of a 2i module.	Check replacement parts (they are labelled with the supplier number) and check the correct code.	Control module fault.
Er12	Relay error.	They may have become stuck together.	Replace the TouchControl.	Control module fault.
Er13	EEprom fault	The EEprom recording is not good.	Replace the TouchControl.	Control module fault.
Er21 and beep	Overheating of the control module.	Extended operation of the coils near to the TouchControl.	Leave to cool and press a sensor to stop the beep alarm.	Leave to cool and press a sensor to stop the beep alarm.
Er22	Sensor fault.	The sensors have become damaged.	Replace the TouchControl.	Control module fault.
Er25	Incorrect TouchControl connection.	Bad connection of the TouchControl.	Check the TouchControl connections.	Control module fault.
Er26	Voltage too high in standby mode.	The voltage is too high in standby mode. The relay activation circuit is defective.	Replace the TouchControl.	Control module fault.
E and beep	Sensor pressed for more than 10 seconds or water has fallen on it.	Sensor pressed for more than 10 seconds or water has fallen on it.	Remove finger from the sensor or dry any water on the TouchControl.	Sensor pressed for more than 10 seconds or water has fallen on it. Remove finger from the sensor or dry any water

				on the TouchControl.

Warnings / Non-faults indicated on the TouchControl : “Encoded with the letter F” These are listed in the final section of the instruction booklet				
Fault / Warning Code	**Fault / Warning**	**Cause**	**Solution**	**User Message**
F0	Interface fault with the cooking sensor or the frying sensor. Communication failure with the induction coil.	The connections on the cooking / frying sensor may be loose. The connection is loose or faulty on induction modules.	3- Check / replace connections between the cooking / frying sensor board and the TouchControl in the case of smaller modules (vitros). Replace TouchControl (including frying sensor board). 4- Check connections on induction modules. Replace the module that controls the zone with F0.	
F2	TouchControl overheating.	Extended operation of the coils near the TouchControl. Above > 105 ºC.	3- Leave to cool.	The areas affected by this error may not operate during a short period of time. Once the TouchControl reaches an accepted temperature, simply touch any button for the warning message to disappear.
Key symbol displayed	The equipment is blocked	The user has blocked it without realising.	Perform the technical service program for TouchControl. (step P2).	

F4	The temperature of the TouchControl is excessively high.	Above > 140 ºC and higher than F2.	1- Leave to cool.	The areas affected by this error may not operate during a short period of time. Once the TouchControl reaches an accepted temperature, simply touch any button for the warning message to disappear.
F8	The maximum operation time for one or more coils has been exceeded.	These times depend on the selected power level and may range between 1 and 10 hours.	1- Leave to cool.	Simply touch any button for this message to be removed. Should you wish to continue cooking, switch the hob on again and select the desired power level.
F9	Metal touch failure.	It may have come loose due to a knock.	1- Check the connection cable. 2- Replace the entire glass assembly.	
The residual heat H/h appears immediately after switching on	Fictitious residual heat H/h indication on the displays.	Various tests that are performed at the factory.	Perform the technical service program for TouchControl. (step P2).	

5 CHECK AND REPAIR

1.1 Activation and deactivation of the technical services program for TouchControl

Warning!

The procedure for accessing the technical services program may only be completed during the first 60 minutes after connecting the TouchControl to the mains supply.

TouchControl units come with a label containing information on the type of TouchControl it is or whether this information can be gained via Quickfinder by clicking on the TouchControl unit.

5.1.1 Superquattro SQ YL196 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the selection button
2	Press and hold the On button
3	A short flash of all segments
4	Release the selection button in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press the selection button in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.2 Basic Balay YL197 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the “-“ button in zone 3
2	Press and hold the On button
3	A short flash of all segments
4	Release the “-“ button in zone 3 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the “-“ button in zone 3 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.3 Bosch YL180 precision selection TouchControl

In order to find the sensor for accessing the services program, the worktop must be on. Once the location is known, it should be turned off again, remembering the location of the sensor.

Step	Operation and indication
0	The unit is off
1	Press and hold the button in zone 3
2	Press and hold the On button
3	A short flash of all segments
4	Release the button in zone 3 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the button in zone 3 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.4 Siemens YL190 monoSlider TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the sensor in zone 3
2	Press and hold the On button
3	A short flash of all segments
4	Release the sensor in zone 3 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the sensor in zone 3 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.5 Neff Digiselect YL188 / Tippad YL189 / metaltouch YL206 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the sensor in zone 3
2	Press and hold the On button
3	A short flash of all segments
4	Release the sensor in zone 3 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the sensor in zone 3 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.6 Gaggenau Comfort YL201 / twistpad YL203 TouchControl

In order to find the sensor for accessing the services program, the worktop must be on. Once the location is known, it should be turned off again, remembering the location of the sensor.

Step	Operation and indication
0	The unit is off
1	Press and hold the sensor in zone 3
2	Press and hold the On button
3	A short flash of all segments
4	Release the sensor in zone 3 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the sensor in zone 3 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.7 Metal Touch BO YL205 / SE YL204 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the “-“ button in zone 3
2	Press and hold the On button
3	A short flash of all segments
4	Release the “-“ button in zone 3 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the “-“ button in zone 3 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.8 Thermador Digiselect YL192 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the sensor in zone 3
2	Press and hold the On button
3	A short flash of all segments
4	Release the sensor in zone 3 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the sensor in zone 3 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.9 Multislider YL169 / YL170 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the ST2 timer sensor in zone 2 or the timer sensor on the left of on/off sensor for 5i
2	Press and hold the On button
3	A short flash of all segments
4	Release the ST2 timer sensor in zone 2 in under 1 second or the timer sensor on the left of on/off sensor for 5i whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the ST2 timer sensor in zone 2 or the timer sensor on the left of on/off sensor for 5i in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.10 Basic BO/SE YL202 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the sensor in zone 3
2	Press and hold the On button
3	A short flash of all segments
4	Release the sensor in zone 3 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the sensor in zone 3 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.11 Domino balay YL213 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the “+” sensor in zone 2
2	Press and hold the On button
3	A short flash of all segments
4	Release the “+” sensor in zone 2 in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the “+” sensor in zone 2 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.12 Domino BO/Ne/TH YL199 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the sensor furthest to the right
2	Press and hold the On button
3	A short flash of all segments
4	Release the sensor furthest to the right in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the sensor furthest to the right in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.13 Domino SE Slider YL207 TouchControl

Step	Operation and indication
0	The unit is off
1	Press and hold the right-hand side of the slider (position 9)
2	Press and hold the On button
3	A short flash of all segments
4	Release the right-hand side of the slider in under 1 second whilst still pressing the On sensor
5	A short flash of all segments
6	Press and hold the right-hand side of the slider in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.14 Oven models. YL 190

Step	Operation and indication
0	The unit is off
1	Press and hold the sensor in the additional zone of zone 4
2	Press and hold the child safety button
3	A short flash of all segments
4	Release the sensor in the additional zone of zone 4 in under 1 second whilst still pressing the child safety sensor
5	A short flash of all segments
6	Press and hold the sensor in the additional zone of zone 4 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**

5.1.15 Oven models. YL202

Step	Operation and indication
0	The unit is off
1	Press and hold the “+” sensor in zone 4
2	Press and hold the “-“ sensor in zone 1
3	A short flash of all segments
4	Release the “+” sensor in zone 4 in under 1 second whilst still pressing the “-“ sensor in zone 1
5	A short flash of all segments
6	Press the “+” sensor in zone 4 in under 1 second
7	“P” and “0” flash on the displays. The services program has been initiated
8	**The services program ends automatically if no buttons are pressed for 120 seconds or after completing programs P0, P2, P8 and P9.**