5.2 Technical Services Program for TouchControl

	Operation	Indication	Status
1	**The unit is in technical services mode. See access to the technical services program in Chapter 5.**	The coil indicator displays are flashing "**P**" and "**0**"	**The services program can be closed down from this menu.**
2	**On/Off button to select next program**	The coil indicator displays are flashing "**P**" and "**1**"	**Sensor, buzzer and displays test**
2.1	Wait while the TouchControl detects the reference values. The upper horizontal segments of the display will remain lit during this process. You must wait until the central horizontal segments of the displays are lit. Individually press all the sensors (except the on/off switch, which is used for selecting the next program) and check the indication shown on the display.	"**0**": → sensor correct "**1**": → sensor lacking sensitivity "**2**": → sensor overly sensitive "**3**": → operating beyond tolerance limits "**4**": → problem with the on/off sensor "**9**": → simultaneous activation of sensors	After checking all the sensors and whether they are working correctly, the program automatically switches to the buzzer and displays test. The buzzer sounds for 2 seconds and all segments and LEDs are lit for 10 seconds.
3	**On/Off switch for selecting next program**	The coil indicator displays are flashing "**P**" and "**2**"	**This menu enables reset to factory default settings and the cancellation of changes made by the user:** • Removal of a fictitious residual heat "H/h" indication • Deletion of data stored in the memory • Deactivation of the "buzzer off" selection • Deactivation of the reduced block time function • Deactivation of the child safety feature (key)
3.1	**After selecting P2, press any sensor except the on/off sensor**	A buzzer will sound and the display will show "o o o o" for 2 seconds	When the "o o o o" appears, factory default settings have been restored.

	Operation	Indication	Status
4	**On/Off switch for selecting next program**	The coil indicator displays are flashing “**P**” and “**5**”	**This menu only exists if a Cooking sensor is present** **The cooking sensor can be calibrated for each zone**
4.1	Selection of the cooking sensor in the zone	The active calibration value is shown on the display	
4.2	Use the element that makes changes (+/- or 1-9 or slider or controls)	The new calibration is shown on the display	If there are other cooking sensors in other zones, this process can be repeated.
4.3	**To store the new calibration values, you must press the on/off button**	The warning buzzer sounds. **“P” and “6” are shown on the corresponding displays.**	**This menu only exists if a frying sensor is present.** **The frying sensor can be calibrated for each zone.**
5	Selection of the frying sensor in the zone	The new calibration is shown on the display	
5.1	Use the element that makes changes (+/- or 1-9 or slider or controls)	The new calibration is shown on the display	If there are other frying sensors in other zones, this process can be repeated.
5.2	**To store the new calibration values, you must press the on/off button**	The warning buzzer sounds. **“P” and “7” are shown on the corresponding displays.**	Indication of parameters.
5.3	From left to right, press all the TouchControl sensors, except the on/off switch. The sensor following the on/off switch is sensor 1, the next to the right is sensor 2, etc.	**Sensor 1**: → for example “51.04” Sensor 2: → for example “o000” Sensor 3: → for example “t000” Sensor 4 → for example “0.000” Sensor 5 → for example “P 112” Sensor 6 → for example “r000” Sensor 7 → for example “----”	• Software version, e.g. V1.04 • Current fault counter (400V) • Max. Temp. of the TouchControl (conversion necessary) • Operation hours counter • Piece number • Counter for the number of times turned on • Reserved

	Operation	Indication	Status
6	**On/Off switch for selecting next program**	The coil indicator displays are flashing “**P**” and “**8**”	**This menu enables life or durability tests to be performed automatically. This is not used for tasks related to technical services.**
7	**On/Off switch for selecting next program**	The coil indicator displays are flashing “**P**” and “**9**”	**Deactivation of the maximum operation time limit**
7.1	Press any sensor, except the on/off switch, for 3 seconds.	“ I I I I” will be shown on all displays	After the 3 seconds, the key LED will be lit and the unit will go into stand-by mode.
8	**On/Off switch for selecting next program**	The coil indicator displays are flashing “**P**” and “**A**”	**This is a detailed test of the sensors. The procedure is the same as for P1. This is not available for worktops with metaltouch.**

Warning!

Summary of the steps for the technical services program.

P0	Access and close of the technical services program
P1	Sensor, buzzer and displays test
P2	Reset factory default values
P5	Cooking sensor calibration
P6	Frying sensor calibration
P7	Indication of parameters
P8	Life test
P9	Deactivation of the maximum operation time limit
PA	Detailed sensor test

5.2.1 Step “P1” for testing the twist or tippad

5.2.1.1 With twist or tippad on the worktop

Wait while the TouchControl detects the reference values.
The upper horizontal segments of the display will remain lit during this process.
You must wait until the central horizontal segments of the displays are lit.

5.2.1.2 Without twist or tippad on the worktop

In this case, a **0** is shown if the **signal is correct**.
A **1** is shown if the **signal is weak.**
A **2** is shown if the **signal is strong.**
A **3** is shown if the **signal is different to the calibration.**
A **4** is shown if the **TouchControl has yet to be calibrated.**

Procedure with twist

Decentralise the twist or tippad in all permitted directions.
If the signal is 0, it is OK.
A 1 is shown if the signal is weak.
A 2 is shown if the signal is strong.

“- -“ must be shown if the test is OK and we are turning the twist or tippad clockwise.
When we turn between 360º and 420º, a counter from 11 to 66 in steps of 11 should appear.
After a further 60º turn, “- -“ should appear, meaning that the controller is OK.
If it does not count up to 66, there is a problem with the rotation detection.

5.2.2 Step “P1” for testing the slider

The Slider test must be performed in order, from left to right in the slider area.

A 1 will be shown in the display during the process. After 2 seconds, the result will be shown.

The speed at which the test is performed must be taken into consideration. If the test is performed too quickly, it is impossible to obtain correct signals.

Code	Meaning
0	Correct operation
1	Sensor lacking sensitivity
2	Sensor overly sensitive
3	Beyond tolerance limits
5	Adjacent sensors very different
6	Simultaneous activation of sensors

5.3 NTC sensor checks

5.3.1 Inductor NTC

Each one of the inductors uses an NTC sensor to control operational temperature. The inductor NTC is a replaceable part.

5.3.2 Induction module NTC

The temperature of the semiconductor devices is measured by two NTC sensors that protect the electronics from excessively high temperatures. These sensors are not replaceable parts.

5.3.3 NTC sensor conversion table

Temp (ºC)	R (KOhm)	Temp (ºC)	R (KOhm)
10	98.264	26	47.788
11	93.229	27	45.794
12	88.632	28	43.873
13	84.404	29	42.019
14	80.489	30	40.228
15	76.845	31	38.496
16	73.435	32	36.819
17	70.233	33	35.193
18	67.213	34	33.616
19	64.357	35	32.085
20	61.647	36	30.597
21	59.070	37	29.150
22	56.613	38	27.741
23	54.264	39	26.369
24	52.016	40	26.065
25	49.860		

5.4 Fan checks

- ► Check that the rotor is not blocked.
- ► The operational voltage is 24 V DC.
- ► It is possible to check the fan using a suitable direct current.

The fan can not be checked by measuring its resistance because it contains a diode in series within its own electronics.

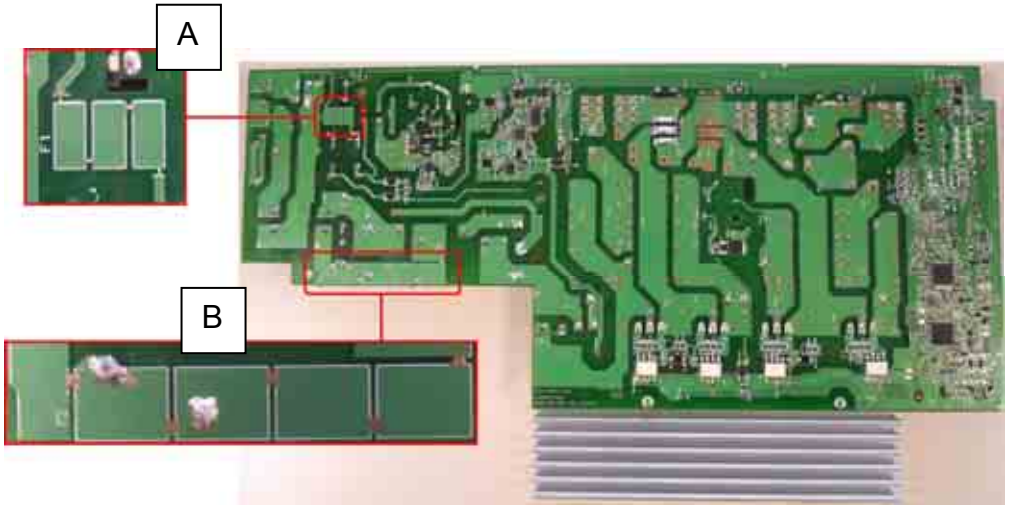
5.5 Coil checks

The inductor contains no functional parts except for the NTC temperature sensor. Therefore, it is not usually the source of faults. However, the following procedure can be followed:

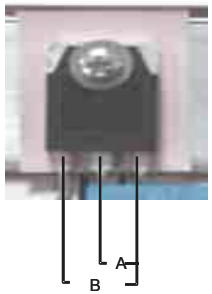
- ► Inductor checks must be performed without voltage.
- ► Remove the mica film carefully so as not to damage it and perform a visual inspection. Check that there are no burnt areas.
- ► Check continuity of the inductor with a tester (<10hm).
- ► Replace the mica film carefully so as not to damage it.

Do not replace the inductor unless burnt areas are found or there is no electrical continuity.

5.6 Induction unit checks (ELIN)



- ► Checks must be performed with no voltage.
- ► Perform a visual inspection paying particular attention to any burnt components.
- ► IGBT checks. The resistance values between



- ► the feet of the IGBT's must be:

A >10 Kohm

B > 5 Kohm

- ► Check that the thread on the inductor connection screw is not worn. If it is, replace the screw. If the thread problem is with the attachment piece, replace the entire unit.
- ► If the induction associated to this coil continues to fail when the above checks provided negative results, replace the coil.
- ► Check that the 2 fusible connections (for the power (B) and the mains supply (A)) are intact. If not, the entire coil should be replaced.

5.7 Checks for when the circuit breaker trips

5.7.1 Unexpected circuit breaker (CB) trip in homes

5.7.1.1 Problem

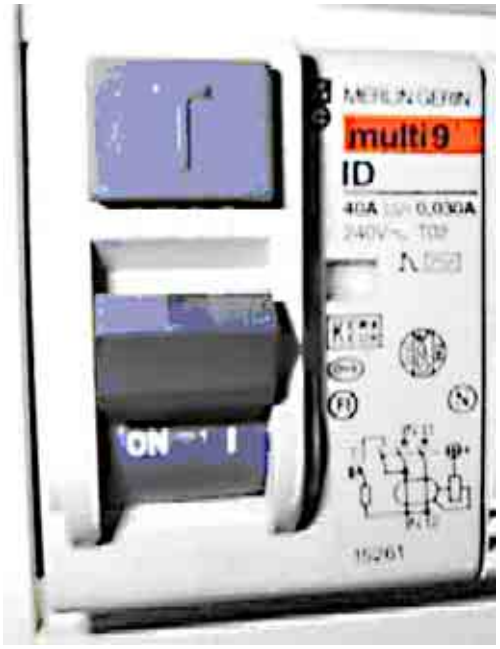
Problems involving unexpected CB trips are becoming increasingly more frequent.
During initial assessment, it is possible to say that they are caused by the fact that the standard circuit breakers that are installed in homes are AC and do not operate correctly with the electronic devices we connect to our installations.

5.7.1.2 Cause

Electronic equipment, used on a massive scale nowadays, is fitted with filtration and protection devices (condensators and varistors) that give rise to transitory leak currents when voltage transitions take place (very difficult to detect).
A particularly important example of such transition is that caused by short circuits to earth points on work sites.
These cases may affect a large number of users connected to the same low voltage network.

5.7.1.3 Solution

The most suitable solution is to adapt the distribution fuse boxes to correctly supply the electrical charges. This means always using type A circuit breakers that are immune to transition.
These systems are not standardised, meaning that each brand provides different names according to their own criteria, such as for example, super-immune (MERLIN GERIN) and high immunity (ABB), etc.



5.7.1.4 What is a circuit breaker?

An electrical device that must be installed in the general fuse box of all homes; its purpose is to rapidly disconnect the electrical installations in the event of a leak or earth connection, thus meaning that the installation will have been disconnected before anyone touches the faulty equipment. In the event of someone touching a live connection, the circuit breaker will disconnect the installation in a sufficiently short period of time so as not to cause serious injury to the affected person.

Circuit breakers are differentiated by having a range of sensitivities.

The **sensitivity** is the value that appears in the catalogue and that identifies the model. It is used to indicate the current strength at which it is desired for the circuit breaker to "trip", in other word, the current strength, if reached, that will result in disconnection of the installation.

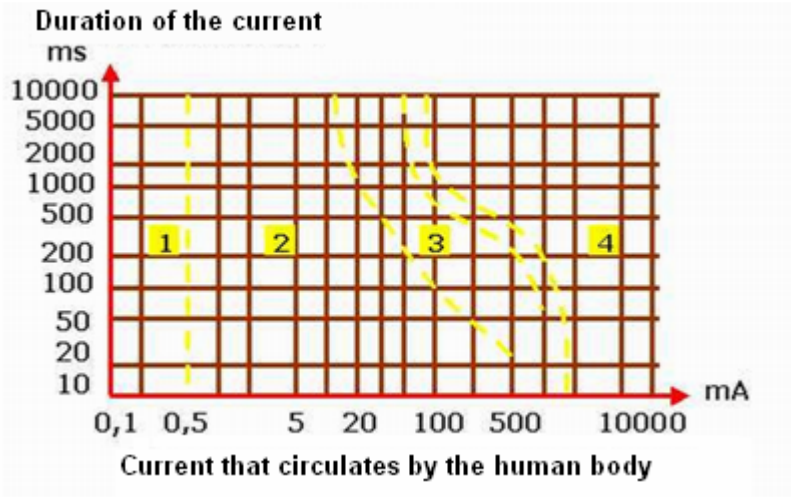
The various sensitivities are:

- Very high sensitivity: 10 mA
- High sensitivity: 30 mA
- Standard sensitivity: 100 and 300 mA
- Low sensitivity: 0.5 and 1 A

The type of circuit breaker normally used in homes is in the high sensitivity category (30 mA).

The degree of damage caused to people is determined by several factors. The following table shows how the body is affected by the flow of current depending on the duration of the flow:

- Zone 1: Perception of the current
- Zone 2: Significant discomfort and/or pain
- Zone 3: Muscular contractions
- Zone 4: Risk of heart attack



Circuit breakers normally have a **test button** (indicated with a **T**) that simulates a problem with the installation and, therefore, will disconnect the installation when pressed. It is recommended that this button be pressed regularly (for example, once a month).

Types of CB

According to manufacturing standards, there are three types:

1. **Type AC** for alternating sine wave currents.
2. **Type A** for alternating sine wave currents or direct pulse currents
3. Timed **type S**, not used in homes as they are not permitted by the REBT unless one of the above breakers is present further along the circuit.

99% of homes have the most simple and economical Type AC fitted, which creates two problems:

1. They are not tripped by pulse currents and may even become blocked

2. They may be tripped unexpectedly (even at night) by high frequency components

The type A circuit breakers provide increased safety due to two basic improvements: they are tripped by pulse currents; and, in the event of permanent failure of the direct circuit, they avoid the relay blocking and not operating correctly with alternating shunts. For this reason:

1. The REBT itself (Article 3.5 of the ITC-BT 24) states: "when it is foreseen that the differential currents may not be sine wave…, the CB devices used shall be of class A"
2. Certain electrical appliance manufacturers (Bosch Siemens) recommend the use of type A circuit breakers for their equipment. Furthermore, countries such as Germany, Switzerland and Belgium only accept the installation of this type of CB and do not accept type AC under any circumstances.

5.7.1.5 Procedure for the technician

- Measurement with the Gossen to ensure correct operation of the appliance according to regulation VDE0701. The method of measurement using the Gossen to check that the repair is correct as a safety test for the equipment is explained below (Rpe< 0.3 Ohms; Riso>=0.5 Mohms).
  The value that must be measured in the event of a circuit breaker trip is the Ipe or Iea current. The measured value should be checked against the table of permitted leak current according to the type of equipment in order to know whether it is operating correctly.
  Ipe (old Gossen) = **Iea** (new Gossen)

  Note:
  The probe is not necessary to measure the Ipe or Iea current

- Fill in the insulation report to provide copy to the user, which contains a recommendation to have their CB type replaced by a professional electrician.
  - Attached is an example report form and another for delivery to the user.

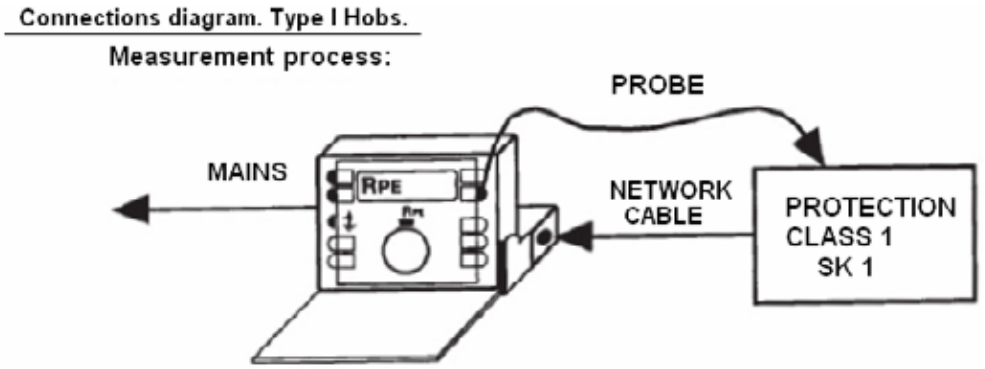
Table of equivalent measurements between new/old Gossen

Gossen measurements	
Old	**New**
Rpe	Rsl
Riso	Riso
Ipe	Iea
If	Idiff

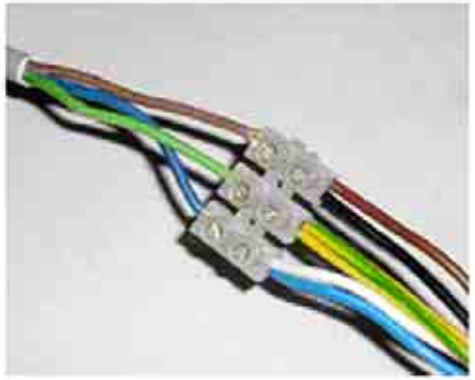
5.7.1.6 How to measure using the old GOSSEN

Necessary material

- Gossen
- A chip with cable and socket, because worktops in newly-constructed buildings will be connected to a 25 A socket (according to low voltage regulations), in order to be able to trip the socket on the same and take measurements with our adapted cable. There will be no problem with those fitted with 16 A connections.
- Equipment for checking.



The SK1 box is the worktop to be checked. The unplugged mains cable from the worktop must be connected to the chip and to the Gossen.



The probe (blue wire in the photo) must be connected to the external or internal metal frame, depending on the model.

Finally, the Gossen must be connected to the mains supply.

Measurement examples:

1- Continuity of the earth cable or resistance of the earth cable.

Connect the Gossen to the Rpe and press the Start button on the Gossen.

The resistance should be below 0.30 Ohms. If a bad result is produced, ensure it is not a problem with the pin, as they are liable to fail. Also check the probe clip as they sometimes come loose on bevelled glass worktops for example.
The average value is 0.08 Ohms.

2- Measurement of the insulation resistance
Connect the Gossen selector to the Rlso and press the Start button on the Gossen.

The resistance level should be above 0.5 Mohms.
The average value is 29.99 Mohms.

Should the measured value be incorrect, the device alarm will sound and an alarm signal will be shown on the display.

3- Measurement of the Ipe for checking against the table of permitted leak intensities

The probe must be removed for this measurement.
Switch the selector to Ipe and press the Start button.
Even if the alarm sounds, the measurement is incorrect. It must be checked against the table of permitted leak intensities depending on the type of equipment.

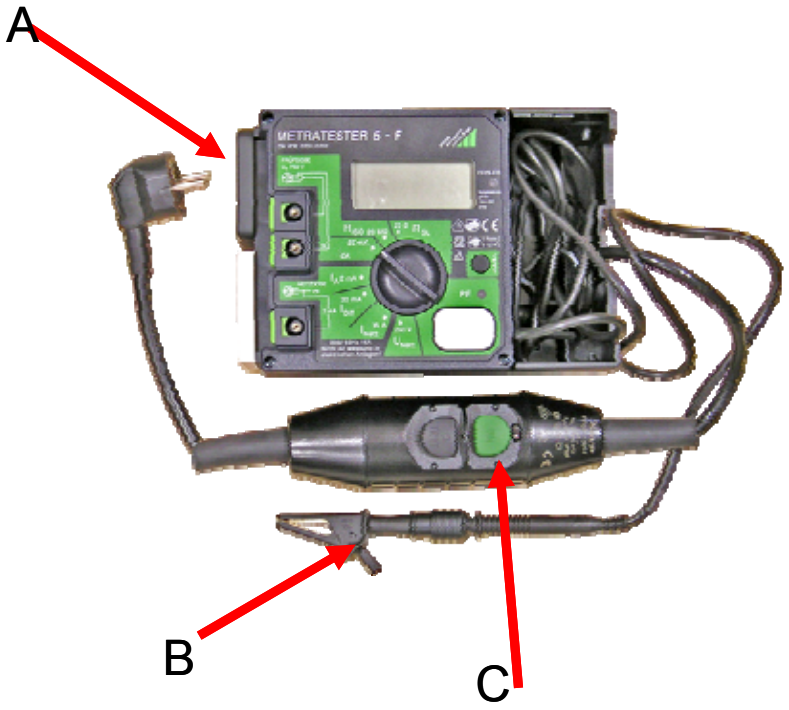
5.7.1.7 New Gossen

Code new GOSSEN - **340756** (830 eur)
Must be calibrated every two years (the old model is no longer available)

GMC-I Gossen-Metrawatt GmbH
Service-Center
Thomas-Mann-Straße 20
90471 Nürnberg · Germany
Telefon +49-(0)-911-8602-0
Telefax +49-(0)-911-8602-253
E-Mail service@gossenmetrawatt.com

Measurement procedure using the new GOSSEN
The equipment must be connected to the socket shown with the arrow in the image above.
The Gossen is connected to the electricity supply.
The probe must also be connected for Rsl and Riso measurements.
This is not necessary for lea measurements.
Position the switch to the corresponding measurement and press the green On button. Press the Test button to switch it off.

5.7.1.8 Photograph to explain the procedure



A- connection for the power cable from the worktop
B- probe for safety test measurement
C- Green button for taking measurement

5.7.1.9 Model report to be provided

Date of issue:
18.03.2008

Insulation Report

B/S/H

Page: 1/1

Report on insulation measurements carried out on the following appliance	Centre: 5300	Bulletin N°: XXXXXX

Specifications of appliance:

Make:	FD:
Balay	8801
Model:	Serial N°
3ET815LP	1114

Specifications of measuring device:

Model:	Calibrated in compliance with standard:
Gossen PG0701N	VDE0701 Date of calibration: 20/06/2007

Details of Measurements taken:

Rpe	0.11 M Ohms	Earth wire resistance
Riso	29.99 M Ohms	Insulation resistance
Ipe	5.45 mA	Earth wire strength
It	0.005 mA	Leakage current

Test result	X	**OK**

Recommendation: contact your electrician
The differential for your home is not compatible with this electrical appliance since it works with high frequencies. You should have a type-A differential installed fitted with a super immunity filter.

Stamped by the Service Center:	Date of inspection: 18/3/2008

Specimen copy

5.7.1.10 Report to be filled in

This can be extracted from the ATI or ARM attached.

Date of issue:
18.03.2008

Insulation Report

B/S/H

Page: 1/1

Report on insulation measurements carried out on the following appliance	Centre: 5300	Bulletin N°: XXXXXX

Specifications of appliance:

Make:	FD:
Balay	8801
Model:	Serial N°
3ET815LP	1114

Specifications of measuring device:

Model:	Calibrated in compliance with standard:
Gossen PG0701N	VDE0701 Date of calibration: 20/06/2007

Details of Measurements taken:

Rpe	0.11 M Ohms	Earth wire resistance
Riso	29.99 M Ohms	Insulation resistance
Ipe	5.45 mA	Earth wire strength
It	0.005 mA	Leakage current

Test result	X	**OK**

Recommendation: contact your electrician
The differential for your home is not compatible with this electrical appliance since it works with high frequencies. You should have a type-A differential installed fitted with a super immunity filter.

Stamped by the Service Center.	Date of inspection: 18/3/2008

Specimen copy

5.7.1.11 Table of permitted leak current

Total leak 230V @ 50Hz		
Type of equipment	**I min**	**I max**
Domino	1.7	3
Domino 38 cm	1.7	3
2l	1.7	3
3l 28Simple	3.5	6
3l 28Double	3.5	6
3l 32Triple	3.5	6
4l	3.5	6
4l BRATER	3.5	6
80 plate warmer	3.5	6
80 28Simple	3.5	6
80 Bräter+plate warmer	3.5	6

Total leak 230V @ 50Hz		
Type of equipment	**I min**	**I max**
90 5l 28Double	5.5	8.6
90 5l 32Triple	5.5	8.6
90 3l 28Simple	3.5	6
90 4l	3.5	6
60cm 2l 28Simple	1.7	3

If the measured Ipe = Iea value is between Imin and Imax, the equipment is correct, although the alarm may sound.

5.8 Radio interference

5.8.1 Problem

The radio cannot be heard properly when operating the inductor.

5.8.2 Cause

Inductor worktops and radios interfere with each other.

Regulations establish certain emission and immunity levels for electronic devices in order to avoid such interference problems. If they occur, they may be caused by one of several reasons:

- The worktop does not comply with the emission limits defined by the regulations governing the product. In our case, the worktops are certified according to European and international regulations EN55011 and CISPR 11. Therefore, they comply with the established emission limits.

  See the list of regulations and emission / immunity tests with which all our inductor equipment comply.

- The radio does not comply with the immunity regulations for the product.

- It is possible for interference to occur when the two devices comply with their respective regulations. These regulations are unable to cover the infinite possible number of individual cases (only general situations) and interference may occur.

5.8.3 Solution

Check that the radio receiver complies with the corresponding immunity regulations for the product.

In those cases where the two devices comply with their respective regulations and interference still occurs, it is recommended to separate them sufficiently.

5.8.3.1 List of regulations and emission / immunity tests

EMC - Emission	
Code	**Title**
EN 55011	Industrial, scientific and medical (ISM) radio-frequency Equipment. Electromagnetic disturbance characteristics. Limits and methods of measurement
EN 61000-3-2	Electromagnetic compatibility (EMC) - Part 3-2: Limits – Section 2: Limits for harmonic current emissions (equipment input current greater than or equal to 16 A per phase)
EN 61000-3-3	Electromagnetic compatibility (EMC) – Part 3-3: Limits – Section 3: Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current =16 A per phase

EMC – Immunity	
Code	**Title**
EN 55014-2	Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus. Part 2: Immunity.
EN 61000-4-2	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 2: Electrostatic discharge immunity test.
EN 61000-4-3	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 3: Radiated, radio-frequency, electromagnetic field immunity test
EN 61000-4-4	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 4: Rapid electrical transition immunity test
EN 61000-4-5	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 5: Surge immunity test
EN 61000-4-6	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 6: Immunity to conducted disturbances, induced by radio-frequency fields
EN 61000-4-11	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 11: Immunity tests for voltage gaps, short interruptions and voltage variations.
EN 61000-4-13	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 13: Harmonics, interharmonic including mains signalling at A. C. Power port, Immunity tests.

5.9 Checking the level of supplied power

5.9.1 Problem

- Low level of supplied power
- Less power is supplied with the new inductor

5.9.2 Cause

- The pot is not suitable. See list of suitable pots and check the pot detection system.
- The new IH5-I technology supplies less power than the old IH4-I technology (ind IV). See regulations.
- Certain regulations governing power have come into force. See regulations.
- The positioning spring that brings the inductors closer to the glass is not in place.

  See position of the spring.

5.9.3 Solution

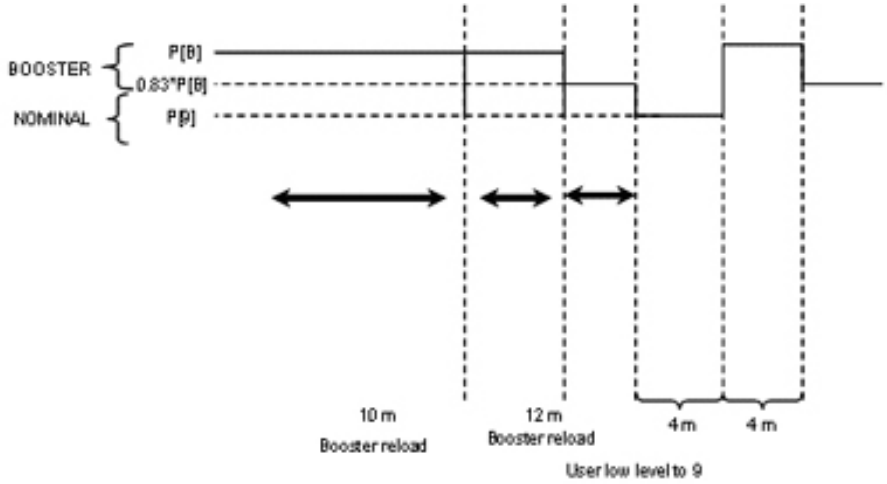
5.9.3.1 Power regulation

5.9.3.1.1 Booster power regulation

For the first ten minutes, the Booster operates at maximum power, in other words, it supplies 150% of inductor power. Subsequently, the booster is regulated and lowered to power level 9.

If the user wishes to reactivate the booster, this can be done. The booster will supply maximum power for a further 2 minutes and then return to power level 9. After the 12 minutes with the booster at maximum power, if the user tries to reactive it once more, only 83% of the 150% of inductor power will be supplied and then it will return to power level 9 (100% inductor power).
At this time, if the user wishes to activate the booster again, they must wait for the same period of time as the time they wish it to be activated for, provided that this is less than 10 minutes.

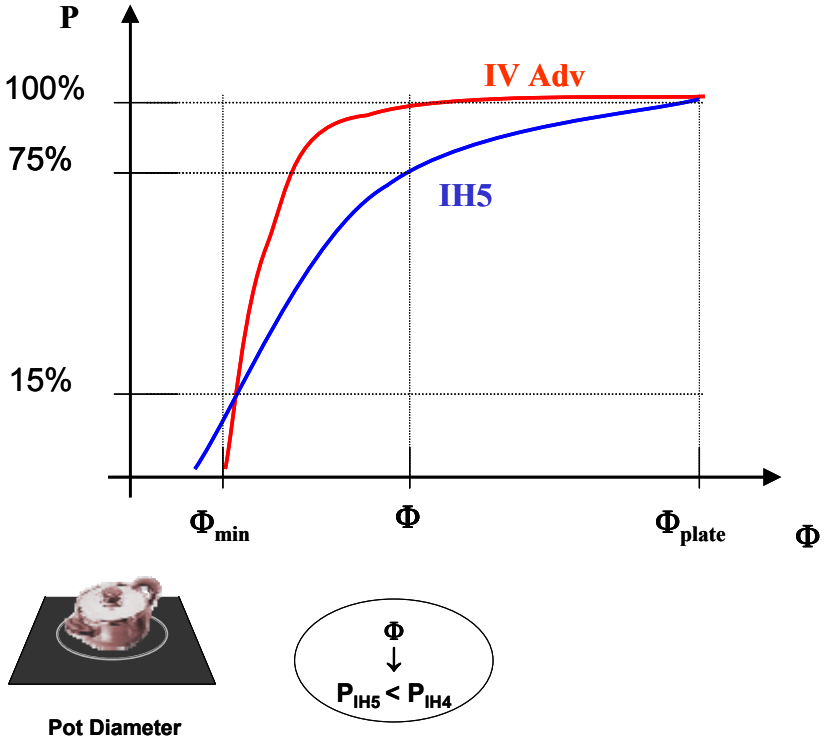
Superbooster (Paella dish)
On these models, it is not possible to reactivate the booster after the initial 10 minutes at maximum power.
If it has been used for 10 minutes, we must wait for 10 minutes in order to try and activate it again.
If we have used it for 5 minutes, we must wait for 5 minutes in order to try and activate it again.

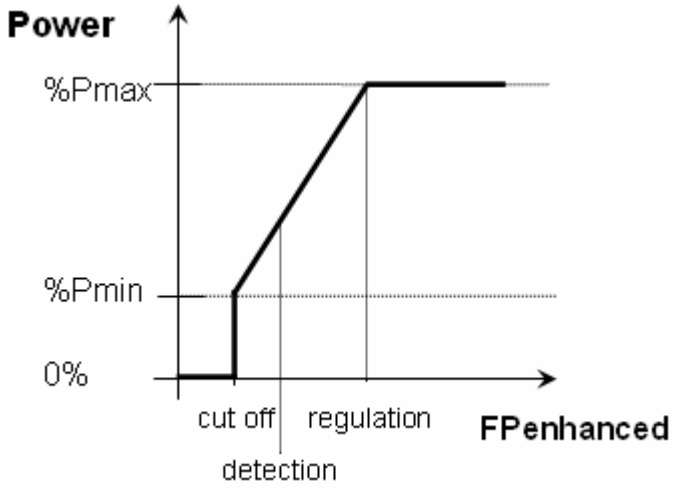


5.9.3.1.2 Power regulation according to the type and size of the pot

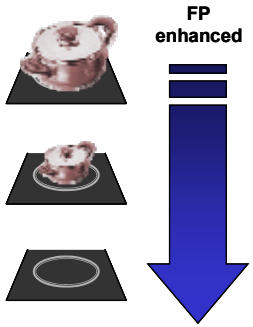
Warning!

The power supplied according to the size of the pot with IH5-I is less than with IH4 (ind IV advanced).





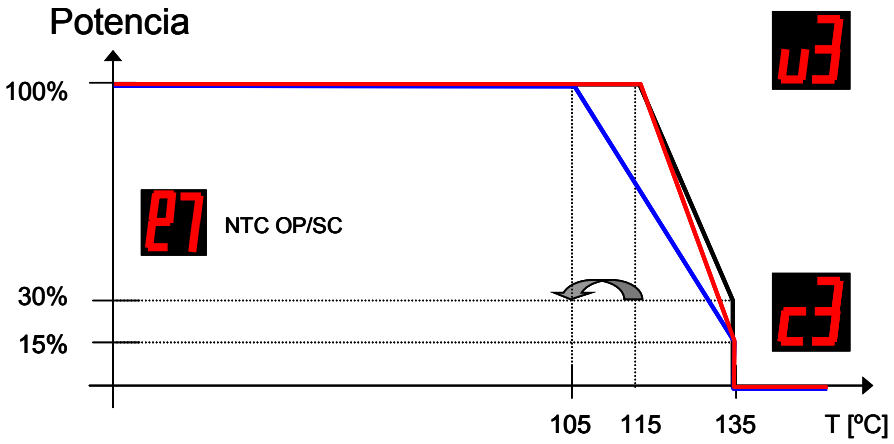
By taking into account the material and size of the pot, the level of power supplied can be reduced and even shut off so as to avoid excessive currents.



For example, for a pot with a base diameter identical to the size of the inductor coil and of a material with good electro-magnetic properties, the FP enhanced obtained gives us maximum power. If we have no pot, the FP enhanced is nil and the power supplied is nil. The display flashes.
If the pot is not of a suitable diameter and its composition is not suitable for our induction cooker, the FP enhanced calculated by our technology will be so low that the power supplied will be nil.

5.9.3.1.3 Power regulation according to the temperature of the IGBT's

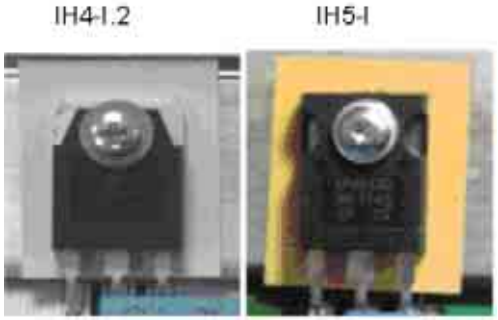
The temperature of the IGBT's is measured using the NTC's located on the rear of the inductor modules. They are marked in red.



[1] IH4-I.2

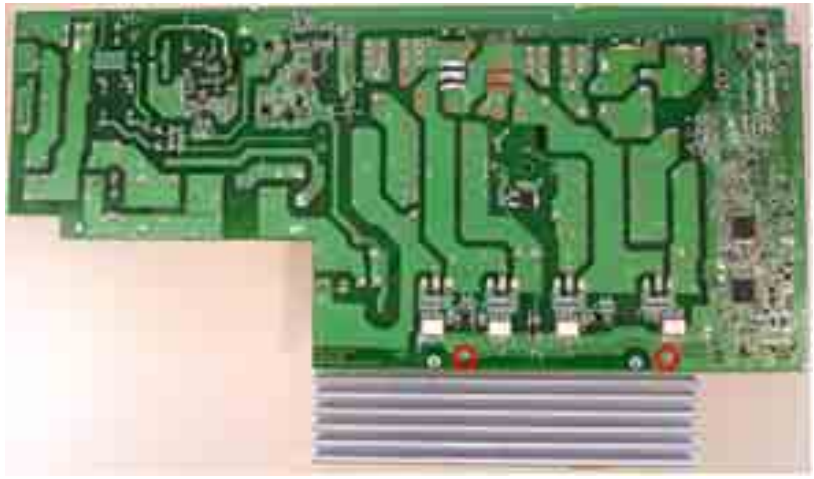
[2] IH5-I

[3] IH5-I critical modules



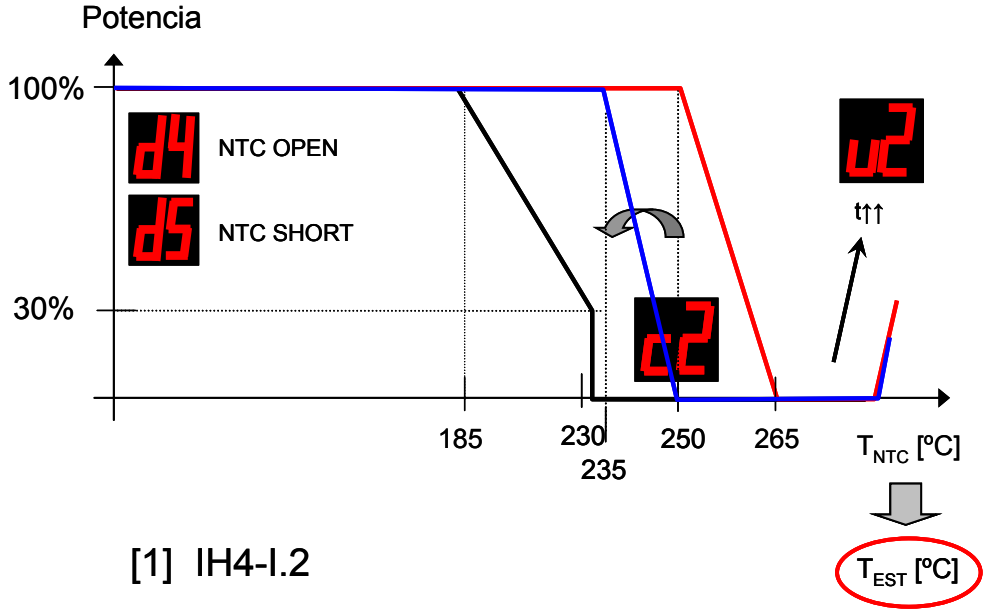
When certain temperature limits are exceeded, a warning is provided via an indication on the TouchControl so as to avoid damage to the IGBT's.

See the chapter on error codes and warnings sent via the TouchControl.



5.9.3.1.4 Power regulation according to the temperature of the NTC's on the inductor

The temperature of the inductors is measured using the NTC's located on the inductors.



[1] IH4-I.2

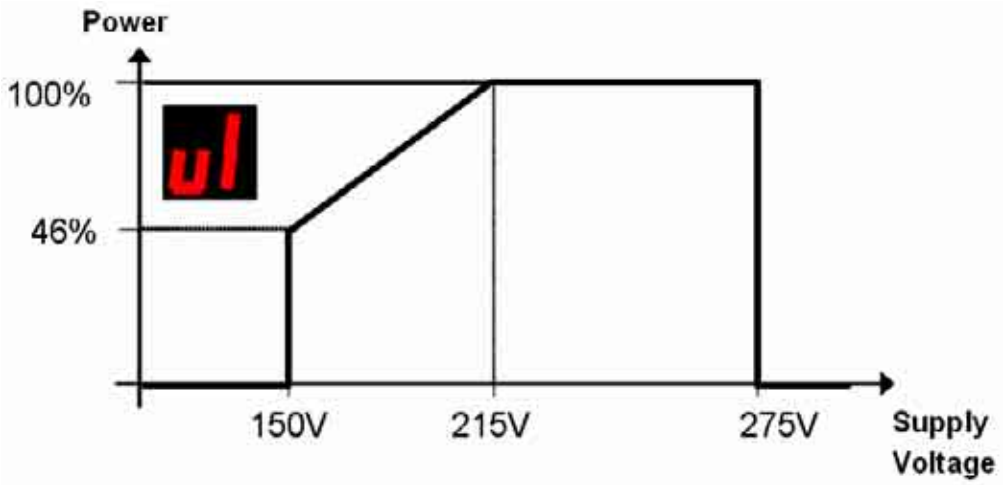
[2] IH5-I

[3] IH5-I critical modules

When certain temperature limits are exceeded, a warning is provided via an indication on the TouchControl so as to avoid damage to the inductors.

5.9.3.1.5 Power regulation according to the supply voltage

When the supply voltage is less than 215V, an indication is shown on the TouchControl display. See the error codes and warnings sent via the ELIN.



5.9.3.2 Position of the spring

If the spring is not in place, it is possible that the distance between the glass and the inductor is too great and the pot is not being detected correctly and/or the power being supplied may be too low.

Measurement´s conditions

To measure the power supply with the hotplates of an IH5 induction hob, a pot with a bottom diameter matching the tested hotplate is placed centered.
A matiching diameter means: bottom-Ø pot = bottom-Ø hotplate +20/-5mm. At table 1 a pot or pan for each IH5 hotplate is recommended for measuring.
The energy consumption is measured with nominal power and afterwards with the boost function like explained in the following:

- The pot is filled with a small amount of water and placed at the hotplate. The pot should never be used empty.
- The Boost power level is started.
- Wait 10-15 seconds until the power is supplied constantly.
- Than measure the energy consumption for a time period of 2 minutes.

- The supplied power is calculated: P(W) = energy consumption (Wh) * 30
- The calculated supplied power is compared with the nominal power (see table 2) of the tested hotplate1.
- The same is repeated with the nominal power level.

Important note:
1) Be aware that regarding the supplied power the tolerance rate of produced BSH induction hobs is -10%/+5% of the nominal power (n.p.)
This means with an induction 4-hotplates-hob the nominal power supply should be between 6480W (=90% of n.p.) and 7560W (=105% of n.p.).
The same applys for each hotplate.

2) The "super boost" power is supplied with the 26T, 28D or 32T hotplate until any other hotplate is activated. At this the power is supplied with more than one module.
In case of activating another hotplate, the "boost" power is supplied, because only the module of the hotplate is available. It changes automatically from "super boost" to "boost" when activating a second hotplate.
"Super boost" and "boost" are not indicated different at the Touch control.

Table 1: Pots/Pans for measuring the power supply

hotplate (cm)	15	18	21	26	28	32	Roaster zone
Pot	Hackmann	Hackmann	Hackmann	Demeyere	Kuhn Rikon	Lacor	Demeyere
serie / article nr.	littala	littala	littala	multiline - REF 42632	cater star REF 31134	inox durit REF 60224	HEZ390010
Ø bottom (mm)	156	184	222	260	283	315	285*170
Ø upside (mm)	188	207	242	320	320	400	320*208
Height (mm)	102	130	134	55	62	50	70
	Accessory						Accessory

Table 2: Overview objective power per IH5 hotplate with nominal and boost function

Objective nominal and boost power (W) with IH5 hotplates									
Power levels		15	18	21	28S	28D	26T	32T	18B
9	17	1400 W	1800 W	2200 W	2400 W	2800	2600	3300	2000
Boost	18	1800 W	2500 W	3300 W	3500	3400	3400	3600	2600
Super Boost[2]	18	-	-	-	-	4400	3400	4600	-

B = function booster
SB = Superbooster
((in case of 26T, 28D and 32T: if another hotplate is active, only the Boost function is available.))

S = single hotplate
D = double hotplate
T = triple hotplate

Pictures of the recommended pots and pans

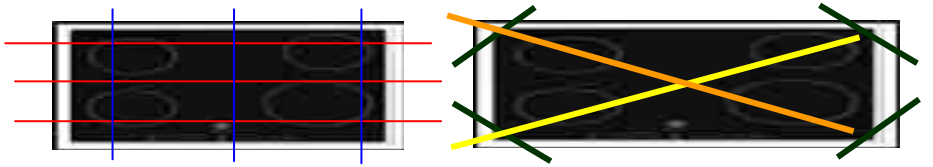
hotplate (cm)	15	18	21
picutres			

hotplate (cm)	28	32	Roaster zone
picutres	 	 	 

5.10 Checking hob flatness

5.10.1 Problem

The equipment does not sit flush to the surface of the hob.



5.10.2 Cause

- Installation has been performed incorrectly. It is possible that the recess guide rails are missing.
- If the FD< 8708, the design of the glass frame assembly may cause flatness problems. There are now 4 profiles within the glass frame assembly to facilitate the solution of this problem.

5.10.3 Solution

Procedure to be followed:

- Check installation.

  Are the recess guide rails in place?

  Is the size of the recess space correct?

- Assemble and disassemble the glass frame to free tension.
- If the FD< 8708 and the above has been checked, a replacement for FD >8709 must be processed.
- In order to check whether this is within tolerance limits (0.5-0.7mm), measurements must be taken using gauges at the points indicated in the diagram and photographs taken in order to be able to send the correctly documented IUA to our factory. This will enable the correct resolution of real flatness problems and speed up the process.

5.11 Checking standard operation noises

5.11.1 Problem

The inductor makes a noise when cooking.

5.11.2 Cause

Induction heating technology is based on the creation of electromagnetic fields that cause heat to be generated directly on the base of the pot. These fields, depending on the construction of the pot, may cause certain noises or vibrations.

5.11.3 Solution

The user should be informed that information about normal operation noises can be found at the back of the instruction booklet and is included below.

These noises form part of the induction technology and do not indicate a fault.

5.11.3.1 Low-pitched buzzing sound coming from the transformer

This noise occurs when cooking with a high level of power. It is caused by the amount of energy being transferred from the hotplate to the pot. This noise will disappear or weaken as the level of power is decreased.

5.11.3.2 A low-pitched whistling sound

This noise occurs when the pot is empty. This noise will disappear as soon as water or food is added to the food.

5.11.3.3 Creaking

This noise occurs with pots that are made of various superimposed materials.
The noise is caused by the vibrations that are created on the joint surfaces between the various superimposed materials.
This noise comes from the pot. The amount and manner of cooking the food may vary.

5.11.3.4 High-pitched whistling sounds

These noises are more common with pots made of different superimposed materials, as soon as they are put on the cooker at high power and in both cooking areas at the same time. These whistling noises disappear or reduce as soon as the power is reduced.

5.11.3.5 Noise from the fan

For optimum use of the electronic system, the hotplate must operate at a controlled temperature. Therefore, the hotplate is fitted with a fan that operates when certain temperature levels are detected via different power levels. The fan may also operate under inertia after the hotplate has been turned off if the detected temperature is still too high.

5.12 Checking pot detection

All inductor areas are fitted with an automatic pot detection system included in the inductor control system. The minimum diameter is approximately 50% of the nominal diameter, although this may vary depending on the material.

When the pot is considered to be of a small size, the inductor control system automatically reduces the supplied power to adapt to the size of the pot.

After activating the cook area, if no pot is placed on it or the pot is made of an unsuitable material, the display showing the level of power will flash. After 90 seconds the TouchControl will emit an acoustic warning and turn off the cook area.

When a pot is recognised as suitable, the power level display will remain constant and the level of power indicated by the display will be supplied.

5.12.1 Problem

- One inductor plate does not detect a pot but another of a smaller diameter does.
- The pot is not detected on any inductor plates.

5.12.2 Cause

- The diameter of the pot is not suitable for that hotplate. See table of recommended minimum diameters.
- The pot is not suitable for our induction technology (the magnet sticks sometimes). Depending on the composition of the pot, our technology may not be programmed to detect it as suitable so as to avoid possible module faults arising from operation in unsuitable conditions. See power supply reduction or cut-off diagram depending on the pot being used.

5.12.3 Solution

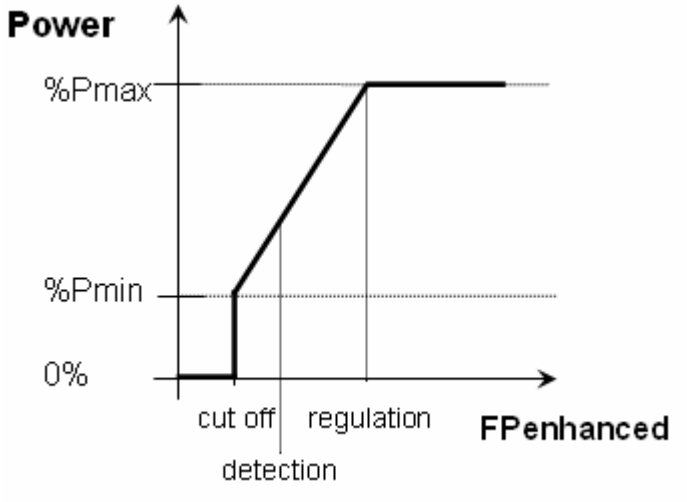
See chapter on recommended pots

5.12.3.1 Minimum recommended diameters

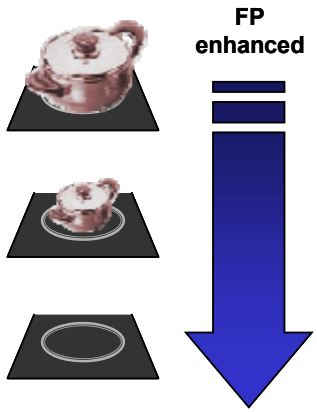
This table is provided as a guide only in order to help the understanding of the problems that may arise in the market.
These values may vary depending on the composition of each type of pot.

Inductor type	Nominal diameter (cm)	Minimum diameter (cm)
15	14.5	6.5
18	18	11.5
21	21	15
28 Simple	28	15.5
18 Bräter	23	18
28 Double	28	23.5
26 (Triple)	27	25
32 (Triple)	32	29

5.12.3.2 Power supply reduction diagram depending on the pot being used



According to the material and size of the pot, the level of power supplied may be reduced or cut off in order to avoid excessive currents.

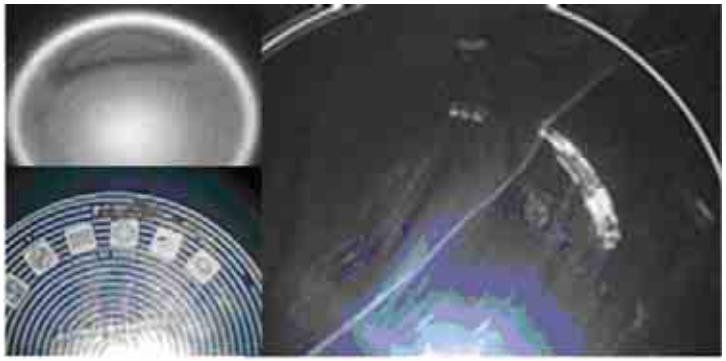


For example, for a pot with a base diameter that is identical to the size of the inductor plate and made from a material with good electromagnetic properties, the enhanced FP obtained gives us maximum power. If there is no pot, the enhanced FP is nil and the level of power supplied is also nil. The display will flash.
If the pot is not of a suitable diameter and the composition of the pot is not suitable for our inductor, the enhanced FP calculated by our technology will be so low that the level of power supplied will be nil.

5.13 Checking of broken glass

5.13.1 Problem

The glass has broken. The enamel from the pot has become welded to the vitroceramic glass.



5.13.2 Cause

- Generally-speaking, cases involving the breakage of glass are caused by a strong increase in temperature to the base of the pot (over 400ºC). The heat from the pot is transferred to the glass (in fact, it can even weld enamel and glass) and the high temperature causes the glass to break.
- This has been seen to occur when using **pots in bad conditions**, with cracks or scratches: the inducted currents “avoid” these areas and concentrate in specific areas, which generate extremely high temperatures.
- Another possibility is with **thinly enamelled pots** or pots in bad states of disrepair: the flatness of the base is lost in the centre and the defective contact with the plate gives rise to areas with extremely high temperatures.

5.13.3 Solution

- This is more commonly seen with inductors when the user is not used to the shorter heating times compared to radiator plates and insufficient attention is paid when using them. In order to mitigate this problem, it has been thought to include in the user manuals comments such as “If you use thinly enamelled pots, you may cause damage to your hotplate. We recommend that you pay particular attention during the cooking process and do not overheat them”.
- Such thinly enamelled pots, due to the type of material and especially due to the thickness of the base, are very weak and can overheat rapidly. This is ever more so when using high levels of power, empty pots or with little oil. If they are left for too long, in other words, when the pot is “abandoned”, firstly the pot covering deteriorates and secondly the base begins to deform, above 250ºC. Deformation of the base then results in the average temperature measured by the sensor under the glass (NTC) being less than the actual temperature, the hob is not regulated and the overheating process is accentuated. When reaching some 500ºC, the enamelled base begins to melt and degrade (forming bubbles) and may even crack or break the glass.

5.14 Cookware for induction and recommendations

5.14.1 General

All saucepans and frying pans with a ferromagnetic base are suitable for induction.

Only pots whose base is uniformly in contact with the magnet should be used (check the entire base).

When using other types of pots, the inductor does not heat up and the power level display will flash.

The minimum diameter of the pot should also be taken into consideration.

5.14.2 Suitable saucepans and frying pans

Enamelled steel saucepans and frying pans

Cast iron saucepans and frying pans

Iron saucepans

Stainless steel saucepans and frying pans, provided that they have a special ferromagnetic base for induction purposes

5.14.3 Unsuitable saucepans and frying pans

Non-ferromagnetic or non-metallic materials

Aluminium saucepans and frying pans

Copper saucepans and frying pans

Tin saucepans and frying pans

Standard stainless saucepans and frying pans

Glass containers (“Pyrex”)

Clay pots

5.14.4 Recommendations

5.14.4.1 ITTALA / DEMEYERE

Pots and pans

444218 pot 16 cm.

444217 pot 18 cm

444210 pot 20 cm

444216 pot 24 cm

444219 pot 22 cm.

464355 frying sensor pan

5.14.4.3 ZENITH MASTER PAELLA PAN

Paella Pans

464338, D 28 cm., D base 23,5 cm.

464339, D 30 cm., D base 25,5 cm.

464340, D 32 cm., D base 28 cm.

464341, D 34 cm., D base 29 cm.

5.14.4.4 28 cm Kuhn-Rikón Paella Pan

The available accessories are:

HZ390260 (Siemens)
HEZ390260 (Bosch)
Z9460X0 (Neff)

5.14.4.5 Bräter

The available accessory is:

HEZ390010
HZ390010

5.14.4.6 Pans for the frying sensor

The available accessories are:

HZ390210 (Siemens); HEZ390210 (Bosch): 15 cm
HZ390220 (Siemens); HEZ390220 (Bosch): 18 cm
HZ390230 (Siemens); HEZ390230 (Bosch): 21 cm

They are available in three sizes: 15 cm, 18 cm and 21 cm
They have a sandwich base.

5.14.4.7 WMF Wok

The available accessories are:

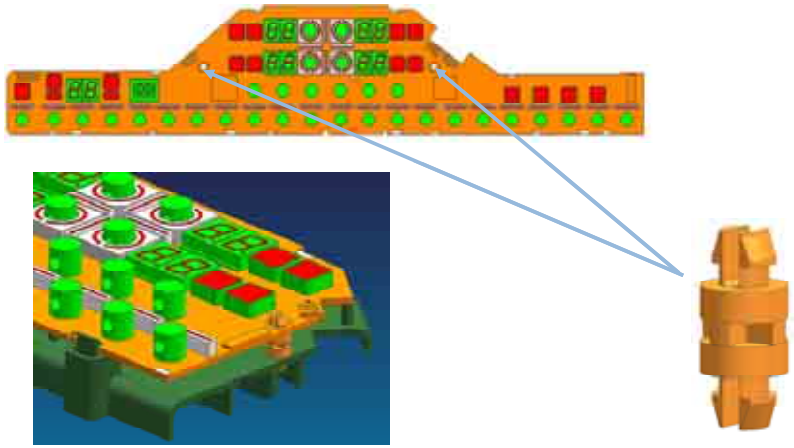
HZ390090(Siemens) ; HEZ390090(Bosch)

Maximum diameter 36 cm and minimum diameter 16 cm.

5.15 Disassembly of the TouchControl

The TouchControl is attached to the TouchControl support with two plastic clips.

This attachment is new compared to IH4.



Warning!

A bic tape is required for disassembly without causing damage.

In the event of damage, they can be ordered as spare parts (see Quickfinder).

5.16 Check: low sensitivity on the TouchControl Slider

5.16.1 Problem

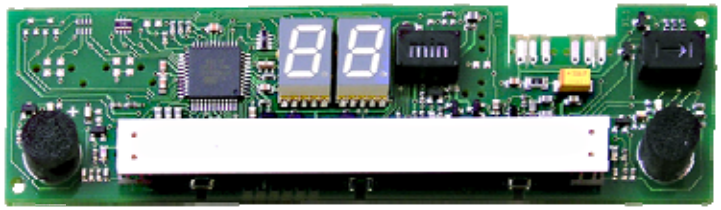
Poor sensitivity when touching the slider. It must be pressed for longer and the reaction is very slow.

5.16.2 Cause

The design of the slider with metal pins is not optimum. They may be pressed down when used without breaking the slider.

Once the slider is in a lower position to the glass, sensitivity is decreased.

Top-down view



Front view

5.16.3 Solution

Warning!

Carefully try to pull the metal pins upwards.

In the event that this does not improve sensitivity, order a new part and take care when handling it.

5.17 Checking the replacement part is correct

5.17.1 Problem

The replacement part does not coincide with the original

5.17.2 Cause

- The supplier has sent the wrong one.
- The warehouse stock has got mixed up.
- The module software is badly saved.

5.17.3 Solution

Inform central office for them to manage the incident.

If the replacement part is an electronic item or module, the supplier code will be located on it. Check to see if this code corresponds to the code on the original part and if not, include this information in the report.

- The label is located on the reverse side of TouchControl units.

- The label is located on the front side of ELIN units.

See table of supplier codes for replacement parts according to model.

The left 1 ELIN is the one located on support ELIN-2.

The left 2 ELIN is the one located on support ELIN-1.

5.17.3.1 Table of replacement parts with supplier code

MODEL	DESCRIPTION	Left 1 ELIN	Right ELIN	Left 2 ELIN	TC
3EB800L	BA.2I.60.SQ.X.X	9000274561	--	--	9000183912
3EB800X	BA.2I.60.SQ.X.X	9000274561	--	--	9000183912
3EB815L	BA.3I.60.SQ.28S.X	9000275522	9000274537	--	9000229599
3EB815X	BA.3I.60.SQ.28S.X	9000275522	9000274537	--	9000229599
3EB820L	BA.4I.60.SQ.X.X	9000274564	9000274537	--	9000183912
3EB820X	BA.4I.60.SQ.X.X	9000274564	9000274537	--	9000183912
3EB900L	BA.2I.60.BAS.X.X	9000274561	--	--	9000237964
3EB900X	BA.2I.60.BAS.X.X	9000274561	--	--	9000237964
3EB9030L	BA.2I.30.BAS.X.X	9000275514	--	--	9000248165
3EB910F	BA.2I.60.BAS.X.FS	9000274561	--	--	9000261599
3EB914L	BA.2I.60P.BAS.28S.X	9000275516	--	--	9000248165
3EB915L	BA.3I.60.BAS.28S.X	9000275522	9000274537	--	9000237965
3EB915X	BA.3I.60.BAS.28S.X	9000275522	9000274537	--	9000237965
3EB917F	BA.3I.60.BAS.28D.FS	9000275523	9000275496	--	9000237967
3EB917L	BA.3I.60.BAS.28D.FS	9000275523	9000275496	--	9000237967
3EB917M	BA.3I.60.BAS.28D.FS	9000275523	9000275496	--	9000283860
3EB917P	BA.3I.60.PZ.28D.FS	9000275523	9000275496	--	9000261070
3EB918L	BA.3I.60.BAS.32T.FS	9000275524	9000275509	--	9000237967
3EB919F	BA.3I.60.LCD.32T.FS	9000275524	9000275509	--	LCD
3EB920L	BA.4I.60.BAS.X.X	9000274564	9000274537	--	9000237964
3EB920X	BA.4I.60.BAS.X.X	9000274564	9000274537	--	9000237964
3EB925F	BA.4I.60.BAS.X.FS	9000274564	9000274537	--	9000237966
3EB925L	BA.4I.60.BAS.X.FS	9000274564	9000274537	--	9000237966
3EB925M	BA.4I.60.BAS.X.FS	9000274564	9000274537	--	9000286371
3EB928L	BA.3I.90P.BAS.28S.X	9000275518	--	9000275521	9000237965
3EB929F	BA.4I.60.LCD.X.FS	9000274564	9000274537	--	LCD
3EB950L	BA.4I.80.BAS.28S.X	9000275526	9000275510	--	9000237964
3EB950M	BA.4I.80.BAS.28S.X	9000275526	9000275510	--	9000283861
3EB957F	BA.4I.80.BAS.28S.FS	9000275526	9000275510	--	9000237966
3EB990F	BA.5I.90.TOP.32T.FS	9000275524	9000275496	9000275520	9000261069
4ET800LT	LY.2I.60.SQ.X.X	9000274561	--	--	9000183912
4ET800XT	LY.2I.60.SQ.X.X	9000274561	--	--	9000183912
4ET813LT	LY.3I.60.SQ.28D.X	9000275523	9000275496	--	9000229599
4ET820LT	LY.4I.60.SQ.X.X	9000274564	9000274537	--	9000183912
CA420350	CN.2I.60.BAS.X.X	9000274561	--	--	9000250933
CA421350	CN.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938
CA422350	CN.4I.60.BAS.BR.X	9000275525	9000274537	--	9000250938
CA428350	CN.4I.80.BAS.BW.X	9000275525	9000275513	--	9000250941
CI261102	GA.4I.60.TOP.BR.FS	9000275525	9000274537	--	9000227509
CI261112	GA.4I.60.TOP.BR.FS	9000275525	9000274537	--	9000227509
CI262102	GA.3I.60.TOP.28D.FS	9000275523	9000275496	--	9000216182
CI262112	GA.3I.60.TOP.28D.FS	9000275523	9000275496	--	9000216182
CI263112	GA.4I.60.TOP.BR.FS	9000275525	9000274537	--	9000195219
CI264112	GA.3I.60.TOP.28D.FS	9000275523	9000275496	--	9000196261
CI271112	GA.4I.70.TOP.BR.FS	9000275525	9000274537	--	9000227509
CI273112	GA.4I.70.TOP.BR.FS	9000275525	9000274537	--	9000195219
CI481102	GA.4I.80.TOP.28S.FS	9000275526	9000275510	--	9000216183
CI481112	GA.4I.80.TOP.28S.FS	9000275526	9000275510	--	9000216183
CI481612	GA.4I.80.TOP.28S.FS	9000275526	9000275510	--	9000216183
CI490112	GA.4I.90P.TOP.X.FS	9000275517	--	9000275521	9000227509
CI491102	GA.5I.90.TOP.28D.FS	9000275523	9000275496	9000275520	9000227510
CI491112	GA.5I.90.TOP.28D.FS	9000275523	9000275496	9000275520	9000227510
CI491602	GA.5I.90.TOP.28D.FS	9000275523	9000275496	9000275520	9000227510
CI491612	GA.5I.90.TOP.28D.FS	9000275523	9000275496	9000275520	9000227510
CIS365GB	TH.5I.90.BAS.32T.CS	9000275524	9000275496	9000275520	9000297517
CIT304GB	TH.4I.80.BAS.28S.X	9000275526	9000275510	--	9000242586
CIT304GM	TH.4I.80.BAS.28S.X	9000275526	9000275510	--	9000242586
CIT365GB	TH.5I.90.BAS.32T.X	9000275524	9000275496	9000275520	9000242588
CIT365GM	TH.5I.90.BAS.32T.X	9000275524	9000275496	9000275520	9000242588
EH375CE11E	SE.2I.30.KB.X.X	9000275514	--	--	9000303876
EH375ME11E	SE.2I.30.TOP.X.X	9000275514	--	--	9000248136
EH475ME11E	SE.1I.40.TOP.28D.X	9000275515	--	--	9000248159
EH575ML11E	SE.2I.60P.TOP.28S.X	9000275516	--	--	9000248136
EH601EB11	SE.4I.60.BAS.BR.X	9000275525	9000274537	--	9000250940
EH601MB11	SE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000231127
EH601MD21E	SE.3I.60.TOP.32T.FS	9000275524	9000275509	--	9000231126
EH601ME21E	SE.4I.60.TOP.X.FS	9000274564	9000274537	--	9000231129
EH601TE11E	SE.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938
EH601TK11E	SE.3I.60.BAS.28D.X	9000275523	9000275496	--	9000250937
EH645EB11	SE.4I.60.BAS.BR.X	9000275525	9000274537	--	9000250940
EH645EB11E	SE.4I.60.BAS.BR.X	9000275525	9000274537	--	9000250940
EH645EC11	SE.2I.60.BAS.X.X	9000274561	--	--	9000250933
EH645MB11M	SE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000231127
EH645QE11E	SE.4I.60.SQ.X.X	9000274564	9000274537	--	9000183912
EH645RE11E	SE.4I.60.SQ.X.X	9000274564	9000274537	--	9000229602
EH645RL11E	SE.3I.60.SQ.28S.X	9000275522	9000274537	--	9000229601
EH645TE11E	SE.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938
EH645TE11X	SE.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938

MODEL	DESCRIPTION	Left 1 ELIN	Right ELIN	Left 2 ELIN	TC
EH651RE11E	SE.4I.60.SQ.X.X	9000274564	9000274537	--	9000229602
EH651RF11E	SE.2I.60.SQ.X.X	9000274561	--	--	9000229600
EH651RL11E	SE.3I.60.SQ.28S.X	9000275522	9000274537	--	9000229601
EH651TE11E	SE.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938
EH651TF11E	SE.2I.60.BAS.X.X	9000274561	--	--	9000250934
EH651TK11E	SE.3I.60.BAS.28D.X	9000275523	9000275496	--	9000250937
EH675LD21E	SE.3I.60.LCD.32T.FS	9000275524	9000275509	--	LCD
EH675LE21E	SE.4I.60.LCD.X.FS	9000274564	9000274537	--	LCD
EH675LE31E	SE.4I.60.LCD.X.CS	9000274564	9000274537	--	LCD
EH675MB11E	SE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000231127
EH675MD11E	SE.3I.60.TOP.32T.X	9000275524	9000275509	--	9000231125
EH675MD21E	SE.3I.60.TOP.32T.FS	9000275524	9000275509	--	9000231126
EH675ME11E	SE.4I.60.TOP.X.X	9000274564	9000274537	--	9000231127
EH675ME21E	SE.4I.60.TOP.X.FS	9000274564	9000274537	--	9000231129
EH675ME31E	SE.4I.60.TOP.X.CS	9000274564	9000274537	--	9000264650
EH675MF11E	SE.2I.60.TOP.X.X	9000274561	--	--	9000231124
EH675MK21E	SE.3I.60.TOP.28D.FS	9000275523	9000275496	--	9000231126
EH675TE11E	SE.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938
EH675TK11E	SE.3I.60.BAS.28D.X	9000275523	9000275496	--	9000250937
EH679MD21	SE.3I.60.TOP.32T.FS	9000275524	9000275509	--	9000231126
EH685MB21E	SE.4I.60.PZ.BR.FS	9000275525	9000274537	--	9000242579
EH685MD21E	SE.3I.60.PZ.32T.FS	9000275524	9000275509	--	9000242580
EH685ME11E	SE.4I.60.PZ.X.X	9000274564	9000274537	--	9000260114
EH685ME21E	SE.4I.60.PZ.X.FS	9000274564	9000274537	--	9000242579
EH685MK11E	SE.3I.60.PZ.28D.X	9000275523	9000275496	--	9000259838
EH775LD21E	SE.3I.60.LCD.32T.FS	9000275524	9000275509	--	LCD
EH775ME21E	SE.4I.60.TOP.X.FS	9000274564	9000274537	--	9000231129
EH785ME21E	SE.4I.60.PZ.X.X	9000274564	9000274537	--	9000260114
EH801ME21E	SE.4I.80.TOP.WP.FS	9000274564	9000275513	--	9000231130
EH801SB11	SE.4I.80.TOP.BW.X	9000275525	9000275513	--	9000303899
EH801TB11	SE.4I.80.BAS.BW.X	9000275525	9000275513	--	9000250941
EH811TL11	SE.4I.80.BAS.28S.X	9000275526	9000275510	--	9000250938
EH811TL11E	SE.4I.80.BAS.28S.X	9000275526	9000275510	--	9000250938
EH845EB11	SE.4I.80.BAS.BW.X	9000275525	9000275513	--	9000250942
EH845EB11E	SE.4I.80.BAS.BW.X	9000275525	9000275513	--	9000250942
EH845TE11E	SE.4I.80.BAS.WP.X	9000274564	9000275513	--	9000250941
EH845TL11E	SE.4I.80.BAS.28S.X	9000275526	9000275510	--	9000250938
EH875LB21E	SE.4I.80.LCD.BW.FS	9000275525	9000275513	--	LCD
EH875LB31E	SE.4I.80.LCD.WP.CS	9000274564	9000275513	--	LCD
EH875LE21E	SE.4I.80.LCD.WP.FS	9000274564	9000275513	--	LCD
EH875LL21E	SE.4I.80.LCD.28S.FS	9000275526	9000275510	--	LCD
EH875ME21E	SE.4I.80.TOP.WP.FS	9000274564	9000275513	--	9000231130
EH875ML11E	SE.4I.80.TOP.28S.X	9000275526	9000275510	--	9000231127

MODEL	DESCRIPTION	Left 1 ELIN	Right ELIN	Left 2 ELIN	TC
EH875ML21E	SE.4I.80.TOP.28S.FS	9000275526	9000275510	--	9000231129
EH875SB11E	SE.4I.80.TOP.BW.X	9000275525	9000275513	--	9000303899
EH875TE11E	SE.4I.80.BAS.WP.X	9000274564	9000275513	--	9000250941
EH876ML11U	SE.4I.80.TOP.28S.X	9000275526	9000275510	--	9000231127
EH879ML11U	SE.4I.80.TOP.28S.X	9000275526	9000275510	--	9000231127
EH885MB11E	SE.4I.80.PZ.BW.X	9000275525	9000275513	--	9000260115
EH885MB21E	SE.4I.80.PZ.BW.FS	9000275525	9000275513	--	9000242558
EH901SK11	SE.5I.90.TOP.28D.X	9000275523	9000275496	9000275520	9000303878
EH975LD21E	SE.5I.90.LCD.32T.FS	9000275524	9000275496	9000275520	LCD
EH975LK31E	SE.5I.90.LCD.28D.CS	9000275523	9000275496	9000275520	LCD
EH975MD21E	SE.5I.90.TOP.32T.FS	9000275524	9000275496	9000275520	9000231131
EH975ME11E	SE.4I.90P.TOP.X.X	9000275517	--	9000275521	9000231127
EH975MK11E	SE.5I.90.TOP.28D.X	9000275523	9000275496	9000275520	9000231132
EH975MK21E	SE.5I.90.TOP.28D.FS	9000275523	9000275496	9000275520	9000231131
EH975ML11E	SE.3I.90P.TOP.28S.X	9000275518	--	9000275521	9000231125
EH975ML21E	SE.3I.90P.TOP.28S.FS	9000275518	--	9000275521	9000231126
EH975SK11E	SE.5I.90.TOP.28D.X	9000275523	9000275496	9000275520	9000303878
EH975YK11E	SE.5I.90.TOP.28D.X	9000275523	9000275496	9000275520	#N/A
EH976LD21U	SE.5I.90.LCD.32T.FS	9000275524	9000275496	9000275520	LCD
EH979MD11U	SE.5I.90.TOP.32T.X	9000275524	9000275496	9000275520	9000231132
EH985ME21E	SE.4I.90P.PZ.X.FS	9000275517	--	9000275521	9000242579
EH985MK21E	SE.5I.90.PZ.28D.FS	9000275523	9000275496	9000275520	#N/A
EI601TB11	SE.4I.60.POL.BR.X	9000275525	9000274537	--	9000270673
EI645EB11	SE.4I.60.POL.BR.X	9000275525	9000274537	--	9000270672
EI645EB11E	SE.4I.60.POL.BR.X	9000275525	9000274537	--	9000270672
EI645EB11M	SE.4I.60.POL.BR.X	9000275525	9000274537	--	9000270672
EI675TB11E	SE.4I.60.POL.BR.X	9000275525	9000274537	--	9000270673
EI875TB11E	SE.4I.80.POL.BW.X	9000275525	9000275513	--	9000270674
N44D30N0	NE.2I.30.BAS.X.X	9000275514	--	--	9000257251
N44K30N0	NE.2I.30.KB.X.X	9000275514	--	--	9000109346
N44K45N0	NE.1I.40.KB.28D.X	9000275515	--	--	9000303875
NIB601T14E	BO.4I.60.POL.BR.X	9000275525	9000274537	--	9000270673
NIB645E14E	BO.4I.60.POL.BR.X	9000275525	9000274537	--	9000270672
NIB672T14E	BO.4I.60.POL.BR.X	9000275525	9000274537	--	#N/A
NIB675T14E	BO.4I.60.POL.BR.X	9000275525	9000274537	--	9000270673
NIB679T14E	BO.4I.60.POL.BR.X	9000275525	9000274537	--	9000270673
NIB801T14E	BO.4I.80.POL.BW.X	9000275525	9000275513	--	9000270674
NIB872T14E	BO.4I.80.POL.BW.X	9000275525	9000275513	--	#N/A
NIB875T14E	BO.4I.80.POL.BW.X	9000275525	9000275513	--	9000270674
NIC645E14E	BO.2I.60.POL.X.X	9000274561	--	--	9000270670
NIT5065UC	BO.4I.80.TOP.28S.X	9000275526	9000275510	--	9000236088
NIT5665UC	BO.5I.90.TOP.28D.X	9000275523	9000275496	9000275520	9000236094
NIT8065UC	BO.4I.80.PZ.28S.FS	9000275526	9000275510	--	9000242582

MODEL	DESCRIPTION	Left 1 ELIN	Right ELIN	Left 2 ELIN	TC
NIT8665UC	BO.5I.90.PZ.28D.FS	9000275523	9000275496	9000275520	9000296949
PIB601N24E	BO.4I.60.TOP.BR.FS	9000275525	9000274537	--	9000236089
PIB675L24E	BO.4I.60.LCD.BR.FS	9000275525	9000274537	--	LCD
PIB675L34E	BO.4I.60.LCD.BR.CS	9000275525	9000274537	--	LCD
PIB675M24E	BO.4I.60.TOP.BR.FS	9000275525	9000274537	--	9000249294
PIB675N24E	BO.4I.60.TOP.BR.FS	9000275525	9000274537	--	9000236089
PIB675T14E	BO.4I.60.BAS.BR.X	9000275525	9000274537	--	9000250938
PIB685N24E	BO.4I.60.PZ.BR.FS	9000275525	9000274537	--	9000242582
PIB801N24E	BO.4I.80.TOP.BW.FS	9000275525	9000275513	--	9000236090
PIB875L24E	BO.4I.80.LCD.BW.FS	9000275525	9000275513	--	LCD
PIB875L34E	BO.4I.80.LCD.BW.CS	9000275525	9000275513	--	LCD
PIB875N24E	BO.4I.80.TOP.BW.FS	9000275525	9000275513	--	9000236090
PIB875T14E	BO.4I.80.BAS.BW.X	9000275525	9000275513	--	9000250941
PIB885N24E	BO.4I.80.PZ.BW.FS	9000275525	9000275513	--	9000242581
PIC645E14E	BO.2I.60.BAS.X.X	9000274561	--	--	9000250933
PID675N14E	BO.3I.60.TOP.32T.X	9000275524	9000275509	--	9000236086
PID675N24E	BO.3I.60.TOP.32T.FS	9000275524	9000275509	--	9000236087
PID685N24E	BO.3I.60.PZ.32T.FS	9000275524	9000275509	--	9000242583
PID775L24E	BO.3I.60.LCD.32T.FS	9000275524	9000275509	--	LCD
PID975L24E	BO.5I.90.LCD.32T.FS	9000275524	9000275496	9000275520	LCD
PID975N24E	BO.5I.90.TOP.32T.FS	9000275524	9000275496	9000275520	9000236091
PIE375C14E	BO.2I.30.KB.X.X	9000275514	--	--	9000303876
PIE375N14E	BO.2I.30.TOP.X.X	9000275514	--	--	9000248170
PIE601N24E	BO.4I.60.TOP.X.FS	9000274564	9000274537	--	9000236089
PIE611T14E	BO.4I.60.BAS.X.X	9000274564	9000274537	--	9000250940
PIE645Q14E	BO.4I.60.SQ.X.X	9000274564	9000274537	--	9000183912
PIE645R14E	BO.4I.60.SQ.X.X	9000274564	9000274537	--	9000229602
PIE645T14E	BO.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938
PIE651R14E	BO.4I.60.SQ.X.X	9000274564	9000274537	--	9000229602
PIE651T14E	BO.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938
PIE675L24E	BO.4I.60.LCD.X.FS	9000274564	9000274537	--	LCD
PIE675N14E	BO.4I.60.TOP.X.X	9000274564	9000274537	--	9000236088
PIE675N24E	BO.4I.60.TOP.X.FS	9000274564	9000274537	--	9000236089
PIE685N24E	BO.4I.60.PZ.X.FS	9000274564	9000274537	--	9000242582
PIE775N14E	BO.4I.60.TOP.X.X	9000274564	9000274537	--	9000236088
PIE801N24E	BO.4I.80.TOP.WP.FS	9000274564	9000275513	--	9000236090
PIE845T14E	BO.4I.80.BAS.WP.X	9000274564	9000275513	--	9000250941
PIE875N24E	BO.4I.80.TOP.WP.FS	9000274564	9000275513	--	9000236090
PIE875T14E	BO.4I.80.BAS.WP.X	9000274564	9000275513	--	9000250941
PIE975N14E	BO.4I.90P.TOP.X.X	9000275517	--	9000275521	9000236088
PIF645R14E	BO.2I.60.SQ.X.X	9000274561	--	--	9000229600
PIF645T14E	BO.2I.60.BAS.X.X	9000274561	--	--	9000250934
PIF651R14E	BO.2I.60.SQ.X.X	9000274561	--	--	9000229600

MODEL	DESCRIPTION	Left 1 ELIN	Right ELIN	Left 2 ELIN	TC
PIF651T14E	BO.2I.60.BAS.X.X	9000274561	--	--	9000250934
PIK601N24E	BO.3I.60.TOP.28D.FS	9000275523	9000275496	--	9000236087
PIK651T14E	BO.3I.60.BAS.28D.X	9000275523	9000275496	--	9000250937
PIK675N24E	BO.3I.60.TOP.28D.FS	9000275523	9000275496	--	9000236087
PIK675T14E	BO.3I.60.BAS.28D.X	9000275523	9000275496	--	9000250937
PIK975N24E	BO.5I.90.TOP.28D.FS	9000275523	9000275496	9000275520	9000236091
PIL575N14E	BO.2I.60P.TOP.28S.X	9000275516	--	--	9000248170
PIL645R14E	BO.3I.60.SQ.28S.X	9000275522	9000274537	--	9000229601
PIL651R14E	BO.3I.60.SQ.28S.X	9000275522	9000274537	--	9000229601
PIL811T14E	BO.4I.80.BAS.28S.X	9000275526	9000275510	--	9000250940
PIL845T14E	BO.4I.80.BAS.28S.X	9000275526	9000275510	--	9000250938
PIL875L24E	BO.4I.80.LCD.28S.FS	9000275526	9000275510	--	LCD
PIL875N14E	BO.4I.80.TOP.28S.X	9000275526	9000275510	--	9000236088
PIL875N24E	BO.4I.80.TOP.28S.FS	9000275526	9000275510	--	9000236089
PIL975L34E	BO.5I.90.LCD.28D.CS	9000275523	9000275496	9000275520	LCD
PIL975N14E	BO.3I.90P.TOP.28S.X	9000275518	--	9000275521	9000236086
T42D20X0	NE.4I.60.BAS.X.X	9000274564	9000274537	--	9000231118
T42D30X0	NE.3I.60.BAS.28D.X	9000275523	9000275496	--	9000231116
T42D85X0	NE.4I.80.BAS.28S.X	9000275526	9000275510	--	9000231118
T42P90X0	NE.3I.90P.BAS.28S.X	9000275518	--	9000275521	9000231116
T43D10N0	NE.3I.60.BAS.28S.X	9000275522	9000274537	--	9000231116
T43D20N0	NE.4I.60.BAS.X.X	9000274564	9000274537	--	9000231119
T43D20S0	NE.4I.60.BAS.X.X	9000274564	9000274537	--	9000231119
T43D40N0	NE.4I.60.BAS.BR.X	9000275525	9000274537	--	9000231119
T43D80N0	NE.4I.80.BAS.BW.X	9000275525	9000275513	--	9000231121
T43P90N0	NE.4I.90P.BAS.X.X	9000275517	--	9000275521	9000231119
T43R10N0	NE.2I.60.BAS.X.X	9000274561	--	--	9000231115
T43R20N0	NE.2I.60.BAS.X.X	9000274561	--	--	9000231115
T43T20N0	NE.4I.60.TOP.X.X	9000274564	9000274537	--	9000231057
T43T40N0	NE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000231057
T43T80N0	NE.4I.80.TOP.BW.X	9000275525	9000275513	--	9000231110
T43T85N0	NE.4I.80.TOP.28S.X	9000275526	9000275510	--	9000231057
T44C80N0	NE.4I.80.LCD.BW.FS	9000275525	9000275513	--	LCD
T44C90N0	NE.5I.90.LCD.28D.FS	9000275523	9000275496	9000275520	LCD
T44D20N0	NE.4I.60.BAS.X.X	9000274564	9000274537	--	9000231119
T44D30N0	NE.3I.60.BAS.28D.X	9000275523	9000275496	--	9000231116
T44D35N0	NE.3I.60.BAS.32T.FS	9000275524	9000275509	--	9000231117
T44D85N0	NE.4I.80.BAS.28S.X	9000275526	9000275510	--	9000231119
T44M40N0	NE.4I.60.PZ.BR.X	9000275525	9000274537	--	9000242584
T44M80N0	NE.4I.80.PZ.BW.X	9000275525	9000275513	--	9000242585
T44T30N0	NE.3I.60.TOP.28D.X	9000275523	9000275496	--	9000264435
EI675ZK11E	SE.3I.60.POL.28D.X	9000275523	9000275496	--	#N/A
T44T40N0	NE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000231057

MODEL	DESCRIPTION	Left 1 ELIN	Right ELIN	Left 2 ELIN	TC
T44T70N0	NE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000231057
T44T80N0	NE.4I.80.TOP.BW.X	9000275525	9000275513	--	9000231110
T44T90N0	NE.5I.90.TOP.28D.X	9000275523	9000275496	9000275520	9000231113
T45C80X0	NE.4I.80.LCD.BW.FS	9000275525	9000275513	--	LCD
T45D40X0	NE.4I.60.BAS.BR.X	9000275525	9000274537	--	9000231119
T45D80X0	NE.4I.80.BAS.BW.X	9000275525	9000275513	--	9000231121
T45P90X0	NE.4I.90P.BAS.X.X	9000275517	--	9000275521	9000231119
T45T40X0	NE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000231057
T45T80X0	NE.4I.80.TOP.BW.X	9000275525	9000275513	--	9000231110
T45T90X0	NE.5I.90.TOP.28D.X	9000275523	9000275496	9000275520	9000231113
T83I40N0MC	NE.4I.60.TOP.BR.FS	9000275525	9000274537	--	9000231058
T83I80N0MC	NE.4I.80.TOP.BW.FS	9000275525	9000275513	--	9000231111
NIK675Z14E	BO.3I.60.POL.28D.X	9000275523	9000275496	--	#N/A
NIB645E14M	BO.4I.60.POL.BR.X	9000275525	9000274537	--	9000270672
CA423350	CN.3I.60.BAS.28S.X	9000275522	9000274537	--	9000250937
PIB645M24M	BO.4I.60.TOP.BR.FS	9000275525	9000274537	--	#N/A
EH679ME21	SE.4I.60.TOP.X.FS	9000274564	9000274537	--	#N/A

MODEL	DESCRIPTION	Left 1 ELIN	Right ELIN	Left 2 ELIN	TC
EH679ME11	SE.4I.60.TOP.X.X	9000274564	9000274537	--	#N/A
EH679MB11	SE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000231127
PIE679T14E	BO.4I.60.BAS.X.X	9000274564	9000274537	--	9000250938
PIB679T14E	BO.4I.60.BAS.BR.X	9000275525	9000274537	--	9000250938
EH651RF11E	SE.2I.60.SQ.X.X	9000274561	--	--	9000229600
EH879SB11	SE.4I.80.TOP.BW.X	9000275525	9000275513	--	9000303899
EH679MK11	SE.3I.60.TOP.28D.X	9000275523	9000275496	--	9000231125
EI645EC11	SE.2I.60.POL.X.X	9000274561	--	--	9000270670
PIL879T14E	BO.4I.80.BAS.28S.FS	9000275526	9000275510	--	9000250938
EH679MK21	SE.3I.60.TOP.28D.FS	9000275523	9000275496	--	9000231126
EH879ME21	SE.4I.80.TOP.WP.FS	9000274564	9000275513	--	9000231130
PIK679T14E	BO.3I.60.BAS.28D.FS	9000275523	9000275496	--	9000250937
EH879ML11	SE.4I.80.TOP.28S.X	9000275526	9000275510	--	9000231127
T44T40M0	NE.4I.60.TOP.BR.X	9000275525	9000274537	--	9000242584
T44T80M0	NE.4I.80.TOP.BW.X	9000275525	9000275513	--	9000242585
CI273612	GA.4I.70.TOP.BR.FS	9000275525	9000274537	--	9000227509
CI490612	GA.4I.90P.TOP.X.FS	9000275517	--	9000275521	9000227509

5.18 Checking SQ YL-196 TouchControl operation

5.18.1 Problem

The new SQ (YL196) has two rows of sensors and, depending on the physiognomy of the finger and the inclination/manner in which the sensors are pressed, certain mistakes can be made. For example, when a user tries to press the hotplate SELECT button, the MINUS button is also accidentally “pressed” (or detected).

If this happens, the TouchControl does nothing because 2 buttons have been pressed at the same time. The user may think that it is not working.

5.18.2 Cause

- The manner in which the buttons are pressed and/or the physiognomy of the user’s finger.

5.18.3 Solution

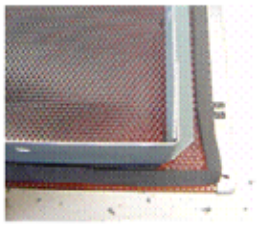
In these cases, the TouchControl should not be replaced but rather the user should be informed/shown how to press the SELECT and TIMER so that only the desired button is pressed, arching the finger if necessary (the TouchControl SQ operates with infrared sensors and contact may be detected even though no contact was made).

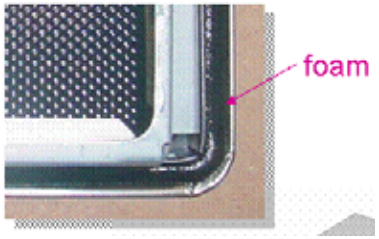
5.19 Checking the “foam”

5.19.1 What is the Foam?

It is a watertight silicon seal. It is applied robotically and improves flatness of the hobs.

before





5.19.1.1 Problem

It is very sensitive to movement and adjustments.

5.19.1.2 Procedure to be followed after repairs

The quality of the foam should always be checked after performing repairs.
If it appears damaged or degraded, the foam should be removed using a knife and a conventional watertight seal be installed on the edge of the recess of the hob in order for it not to be seen extruding beyond the glass. In order to choose the spare part, we must look for it in qfinder in the position 0199.

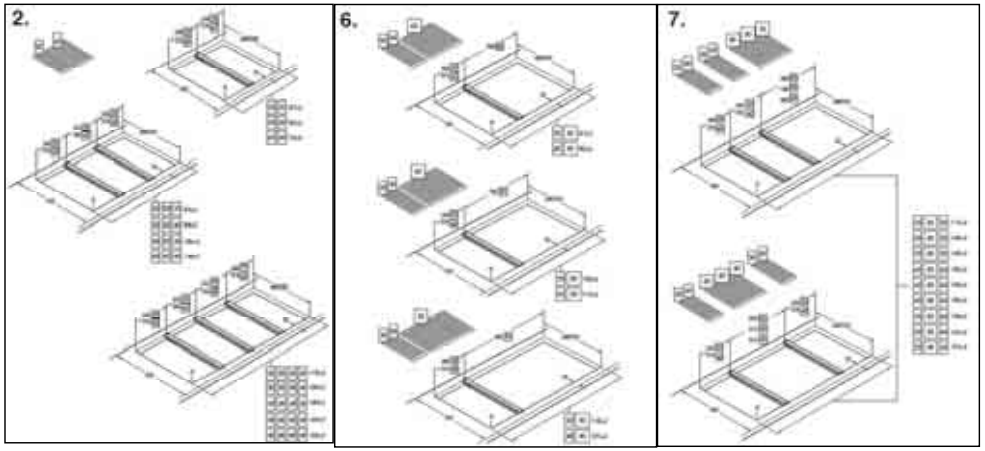
Warning!

These seals should always be carried in the technician’s tool bag.

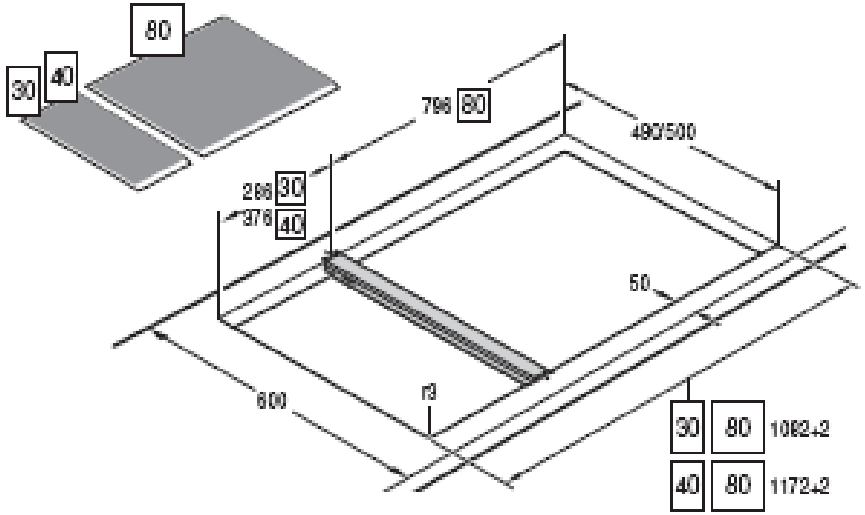
5.20 Checking perfect built-in accessory joint

5.20.1 Installation method

5.20.1.1 Select a combination from the installation manual

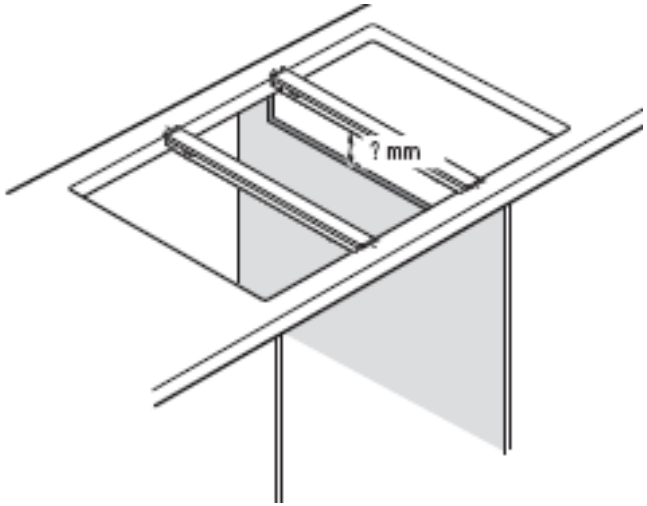


For example:



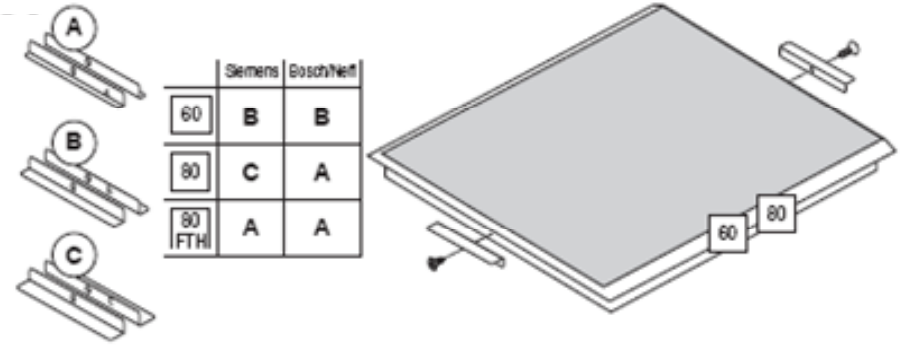
5.20.1.2 Prepare the kitchen furniture item

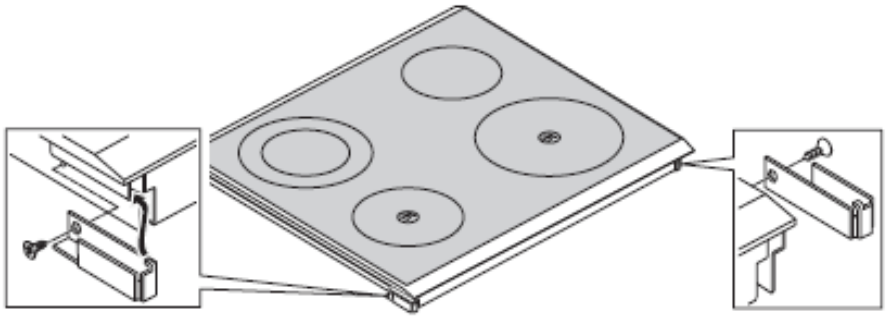
The possibility of having to make adjustments to the interior walls of the kitchen furniture item must be taken into consideration.



5.20.1.3 Select the necessary adapter

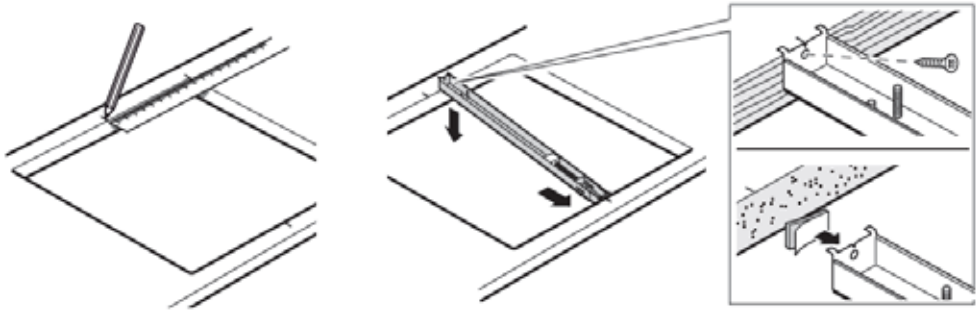
If it is required to combine a domino with a 60 or 80 cm cooker, the suitable adapter must be selected.





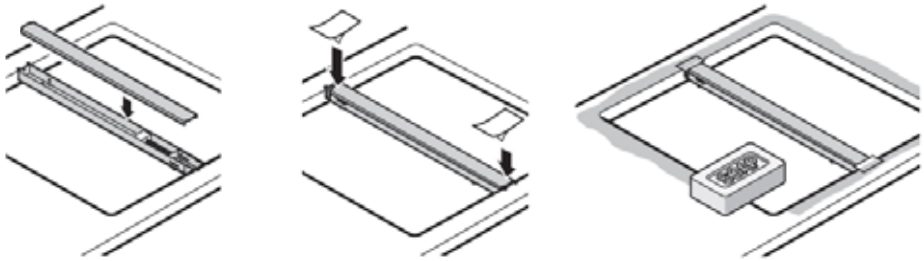
5.20.1.4 Prepare the recess

Take measurements for attaching the support. In the case of wooden hobs, the support is attached using screws and, in the case of marble or granite worktop, it is attached using adhesives.



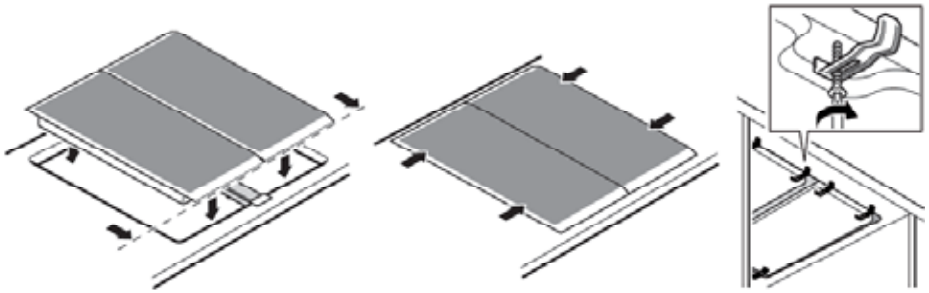
5.20.1.5 Install the upper cover on the support

Adjust the upper cover of the support and protect metal parts with adhesives.
Clean the work area.



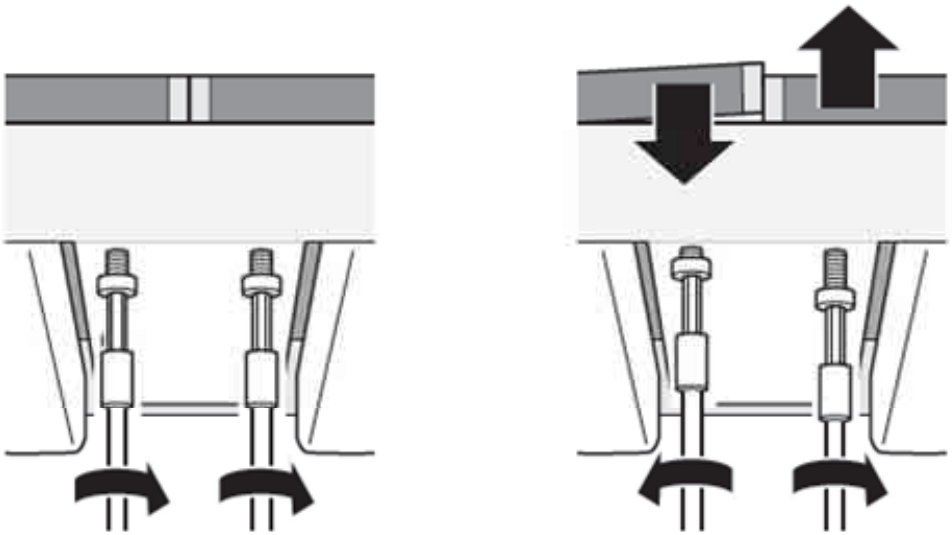
5.20.1.6 Assembly the cooker and fix it in place

Cookers are fixed in place using metal supports.



5.20.1.7 Adjust the height of the cookers

In order to provide perfect height adjustments, screws can be found on the lower part of the joint accessory for raising and lowering each part individually.

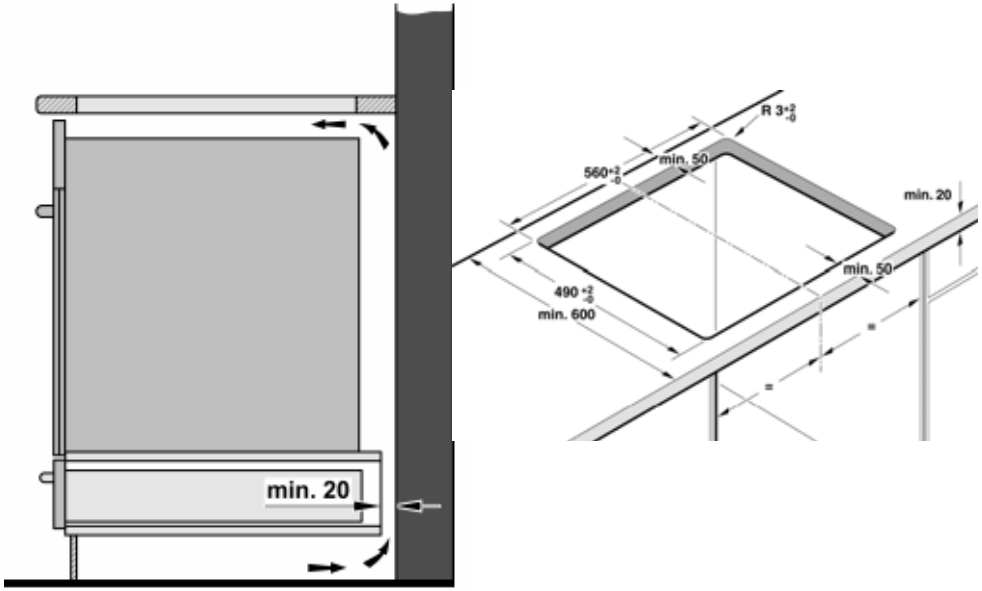


5.21 Checking necessary ventilation: 60/70 cm

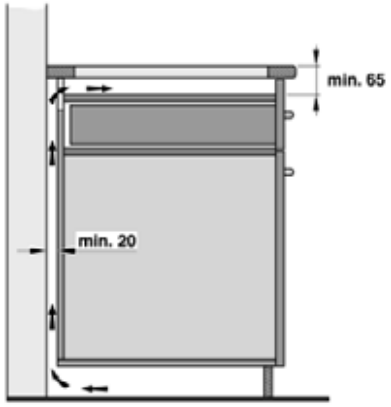
5.21.1 Installation method

5.21.1.1 60/70 cm installation with basic frame

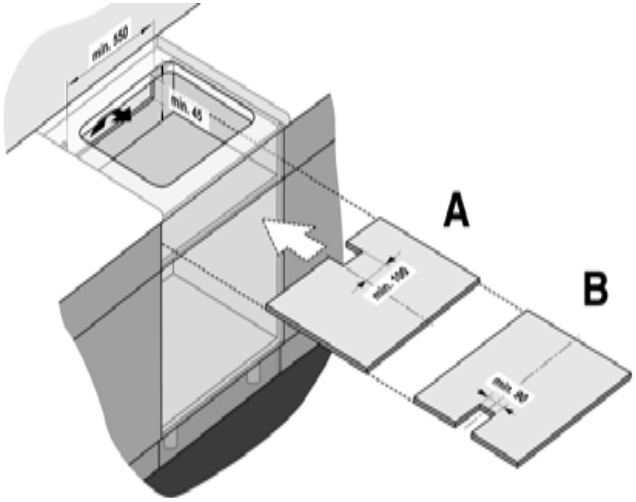
- The recess measurements are: 560 x 490 mm. The necessary ventilation space must be taken into consideration. See diagrams.
- Installation in a 20 mm thick worktop is possible.
- If the cooker is installed above an oven, maintain the recommended measurements for the rear. In these cases, the worktop must have a minimum thickness of 30 mm.



- If the cooker is installed above a drawer, the minimum ventilation measurements for the rear must be considered and a distance of 65mm between the upper part of the cooker and the upper part of the drawer must be maintained.

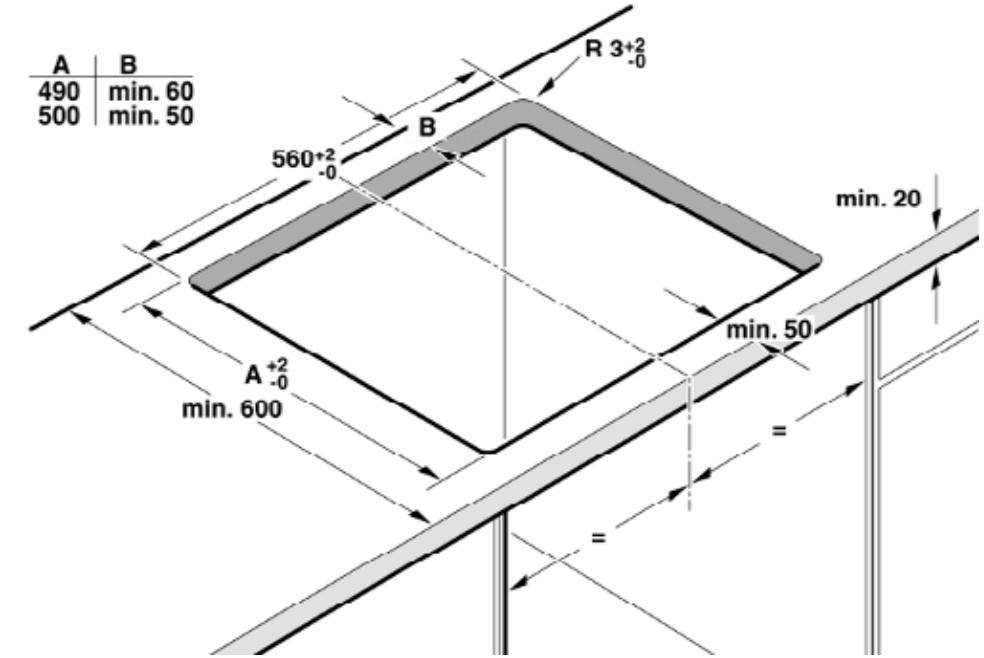


If the objects contained in the drawer heat up, the following option may be offered to the client provided that the 65mm gap has been maintained: a wooden panel can be installed (A: 4I and 3I; B: 2I) or order an accessory from the technical service with code **680502**.



5.21.1.2 60/70 cm installation with top frame

The only difference from the previous method is the size of the recess hole.



5.22 Installation of flat recess in timber using accessory

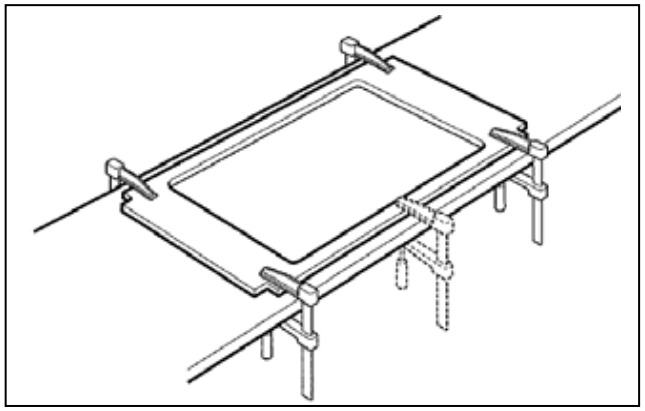
5.22.1 Components

The accessory consists of two parts, the recess model and the flat frame. It is only available for 60cm and 80cm cookers and 2 accessories must be ordered so as to have a complete accessory.

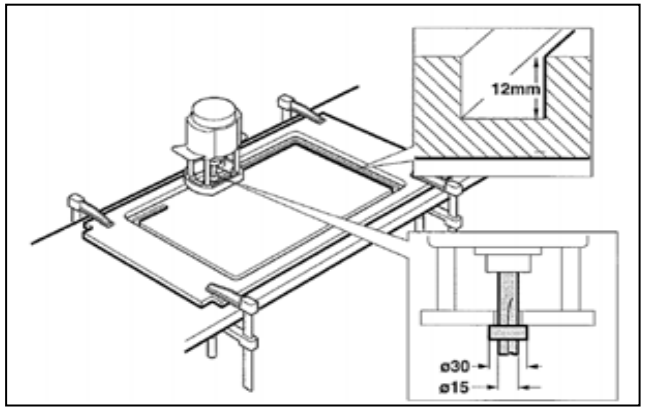
60 cm flat frame	60 cm recess model	80cm flat frame	80cm recess model
HZ395600	HZ395601	HZ395800	HZ395801
HEZ395600	HEZ395601	HEZ395800	HEZ395801

5.22.2 Installation method

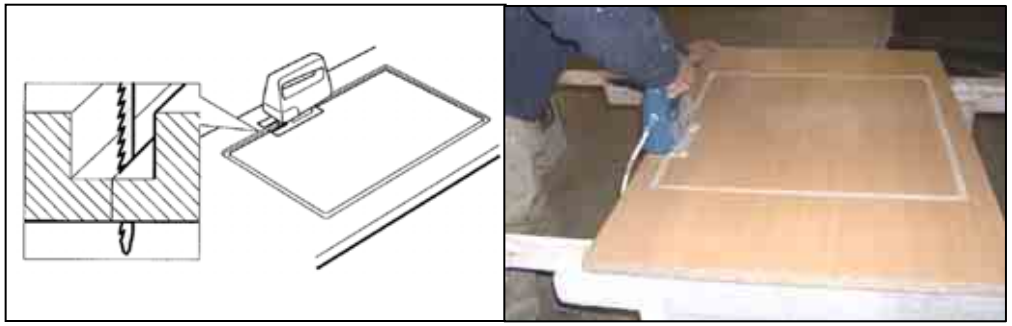
5.22.2.1 Attachment of recess template to the worktop



5.22.2.2 Prepare the recess hole, bearing in mind the measurements in the installation manual

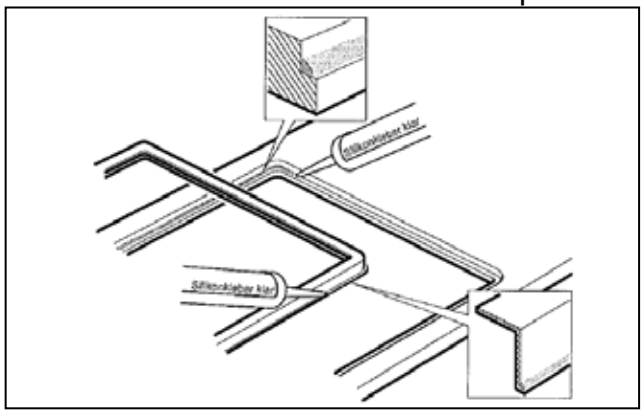


5.22.2.3 Saw the hole in the worktop around the line prepared using the recess template

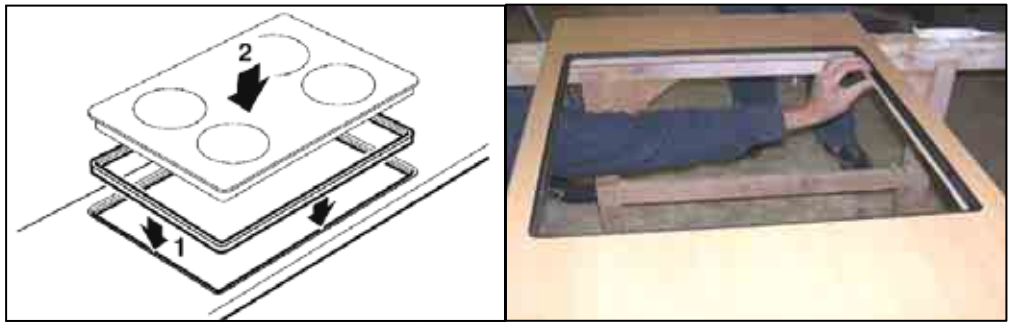


5.22.2.4 Stick the frame using silicone

Silicone must be used on the worktop and on the frame.

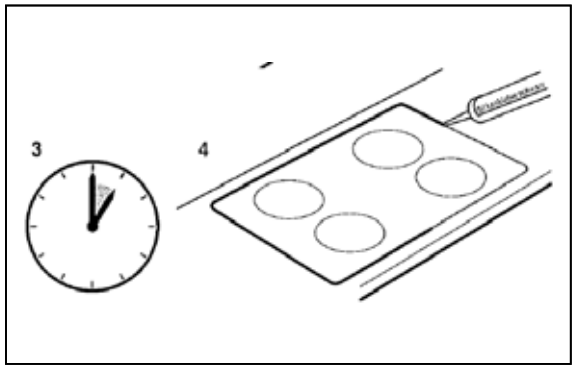


5.22.2.5 Attach the frame first and the cooker second



5.22.2.6 Wait one hour

After one hour, the gap between the worktop and the frame must be filled with silicone.



5.23 Assembly and disassembly: 2i

5.23.1 Disassembly of the apparatus:

► Remove the cooker plate carefully so as not to damage the installation pivots.

► Place the plate on top of the cooker with the glass face up, taking care not to damage it.

To access the radiating heater elements:

► Disassemble the vitro cover (sheet metal) by removing the screws

To access the electronic components:

- Remove the screws from the 2I electronic support and the TouchControl support.
- Turn the 2I electronic assembly over.

In this way, the TC can be replaced, for example.

To access the ELIN plate, relays plate or the fan:

- Disconnect the TouchControl and remove the support.
- Disconnect the inductor (4 power connection screws, two NTC connectors and an earth terminal)

5.23.2 Assembly of the apparatus:

► Follow the above steps in reverse.

► Install the plate in the cooker carefully so as not to damage the installation pivots.

Warning!

Power connection to the inductors is made using an eye terminal and a metric thread screw. Turn the screw until the terminal can no longer be turned by hand. Should the screw be tightened too far, the electronic inductor plate may be rendered inoperational.

5.23.3 Assembly of the relay plate control cable

Warning!

It must be installed in the area near to the IGBT's.

1.1.4 Replacement of the glass

Warning!

All 2-inductor models have rivets on the front.

This means that the glass-frame assembly on the interior frame can not be disassembled. Therefore, if it is necessary to replace the glass or any of the frames, the rivet must be removed with a rivet remover tool.

This is the case due to certain technical problems.

5.24 Check of residual heat indication

We have two levels which indicate residual heat:

“h” for lower temperatures or operating times

“H” for higher temperatures or longer operating times.

Warning!

Avoid touching the cooking zone showing this indication.

Spare part number 341176

Spare part number 340961

5.24.1 Induction zones

The h/H remain lit while they are above certain temperature values.

The temperature is measured by the NTC of the inductor and it is the ELIN which transfers the value to the touch Control.

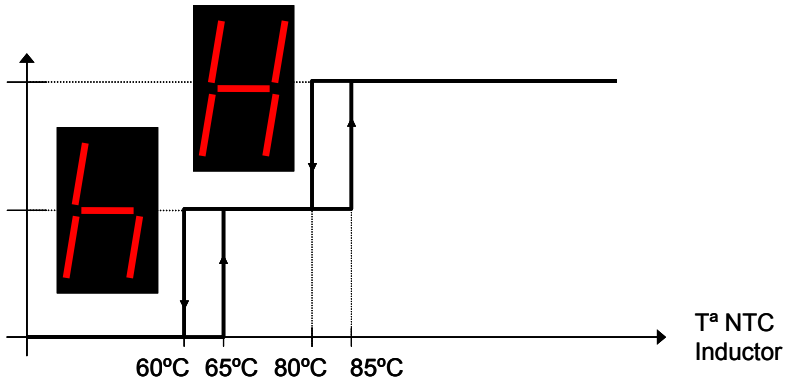
The residual heat indication doesn’t appear while the zone is giving power. It only appears when the zone is not working or when there is no pan above.

The indication is programmed to appear in the cooling curve after a heating upper 100 ºC.

It can be measured above the glass ceran with a temperature sensor for surfaces with the following spare part number.

For the previous project IH4-I:

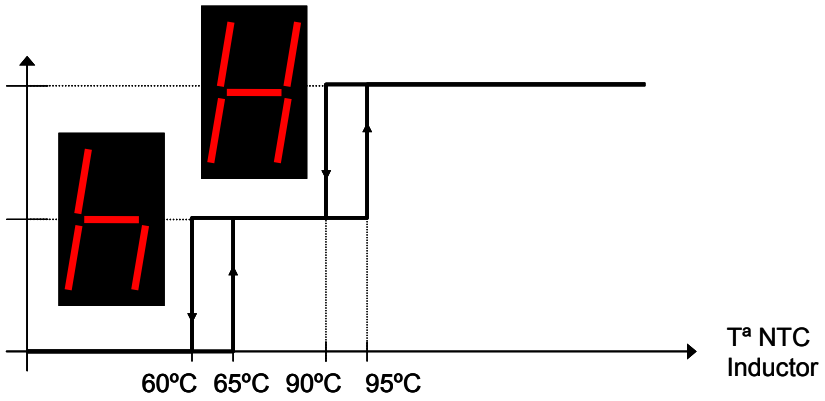
Two levels of residual heat indication



„h „ is shown when the temp. Of the NTC of the inductor is higher than 65 ºC and lower than 80 ºC. and disappears when the temp is lower than 60 ºC.
“H” is shown when the temp. of the NTC of the inductor is higher than 85 ºC and disappears when the temp is lower than 80ºC.

For the new project IH5-I:

Two levels of residual heat indication



„h „ is shown when the temp. of the NTC of the inductor is higher than 65 ºC and lower than 90 ºC. and it disappears when the temp is lower than 60 ºC.
“H” is shown when the temp. of the NTC of the inductor is higher than 95 ºC and disappears when the temp. is lower than 90ºC.

5.24.2 Radiant heaters of mixed devices

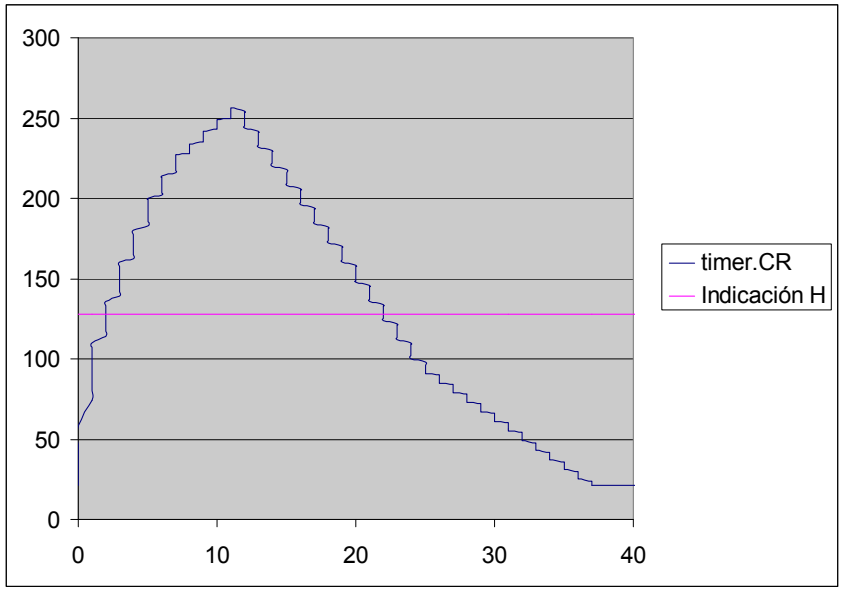
The h/H stay lit while they are above certain values of times, depending on the power selected.

The time counter is found in the ELIN, which transfers the corresponding residual heat indication value to the touch Control .

To provide an example, a graph is shown here, valid only for maximum powers.

If, for example, we switch on any burner at maximum level, in approximately 8 seconds, the small letter appears.

When it rises above 128ºC = 2 MINUTES (straight pink line) the capital H appears



Tª ºC - axis of the Y

Time in minutes – axis of the X

On average, it takes about 11 minutes to reach 250 ºC.

5.24.3 False indication of residual heat

In the factory, some device operation tests are carried out and at times they forget to return to the factory values.

Then, when the device is connected, the small “h” appears in the touch Control without having switched on any zone. .

The small “h” remains static for 37 minutes until disappearing and then the operation returns to normal.

It can also be deleted entering the technical service programme and accessing step 2. See technical service programme and how to access according to the corresponding model.