

INDUCTION HOB

KHVI90TC

Installation and users instruction

Index

Important safety warning	4
General description	8
Ventilation	8
First switch-on	8
Control description	9
Displayed functions	9
Functions	10
Turning on appliance	11
Turning on a cooking area	11
Turning off a cooking area	11
Turning off all cooking areas	11
Power levels	11
Booster "P"	11
Joining two areas	11
Automatic turning off	11
Protection in case of accidental turning on	12
Child safety	12
Timer function	12
Timer starting	12
Courtesy timer	12
"HEAT-UP" function	12
Pause	13
Recall function	13
Heating to 42°C, 70°C, 95°C function	13
Pan presence recognition	13
Residual heat indication	13
Key blocking/unblocking	13
Power management	13
Overheating	14
Limit of the duration of operation	14

Advice when cooking	15
Pots.....	15
Size of pots	15
Maintenance and cleaning	16
Controls to carry out in case of malfunction.....	16
Installation	17
Respect for the environment	17
Instructions for installation	17
Electrical connection	18
Connecting cable to hob	18

Important safety warning



READ CAREFULLY BEFORE USING

- Only qualified technicians should install the appliance. The technician will not be held responsible for any damages caused by electrical malfunctions.
- The hob must be installed in the appropriate inset.
- The appliance should be used solely for cooking foods, excluding any other domestic or industrial uses.
- Remove the adhesive labels from the glass on the hob.
- Do not modify or alter the appliance.
- Do not use the hob as a working zone.
- The appliance must be connected and installed in compliance with current local regulations.
- Do not use extension cables for connections.
- The appliance should not be used with pots and pans that are unsuitable for induction cooking.

USING THE APPLIANCE

- After use, switch off the hob by means of its control device and do not rely on the cookware detector.
- **WARNING:** unattended cooking on a hob with fat or oil can be dangerous and may result in fire.
- **WARNING:** in the event of fire never attempt to extinguish a flame/ fire with water, but turn off the unit and cover the flame for example with a lid or a fire blanket.

Important safety warning



- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with appliance.
- **WARNING:** Accessible parts may become hot during use. To avoid burns young children should be kept away.
- Cleaning and maintenance must never be carried out by unsupervised children.
- Make sure that the power cable does not come into contact with the glass or a pot.
- Magnetic objects such as credit cards, floppy disks, calculators, should not be placed close to the working appliance.
- Do not use any metallic object except for cookware suitable for induction.
- Do not cover the cooking area with inflammable materials.
- The appliance must be used by responsible persons.
- Metallic objects such as knives, spoons, forks or covers should not be placed on the cooking area as they can become hot.
- If the surface is cracked, switch off the appliance to avoid the possibility of electric shock.
- The appliance is not intended for driven by an external timer or separate remote control system.
- Do not use steam appliances for cleaning.

Important safety warning



PRECAUTIONS

- Unsuitable pots could ruin the surface of the hob.
- Do not use abrasive substances to clean the appliance.
- Avoid dropping heavy objects on the hob.
- Delicately place pots on the hob.
- Make sure that the appliance's ventilation complies with the instruction manual.
- Do not place empty pots on the hob.
- Sugar, synthetic materials or aluminium objects should not come into contact with the cooking zones.
- Avoid placing hot containers on top of the control panel.
- If there is a drawer or a panel under the hob, this must be at least 2,5 cm from the lower part of the hob to ensure proper ventilation.
- Do not place inflammable objects inside the draw located under the hob.

IN CASE OF MALFUNCTION

- When a malfunction occurs turn off and disconnect the appliance.
- If cracks appear on the glass or it is broken, disconnect the appliance and contact your authorized service centre.
- Any repairs should be made by authorized personnel.

Important safety warning



SUGGESTIONS

- Make sure that the pot is in the middle of the cooking zone. Ideally, the bottom of the pot should cover the entire cooking zone.
- The magnetic field produced by the induction hob could affect the proper working of pacemakers. Detailed information should be obtained from your doctor.
- Avoid placing synthetic materials or aluminium objects in contact with the cooking zone.

General description

Ventilation

Ventilation of the hob is completely automatic. The cooling fan for the electronics located under the hob works at slow speed up to the temperature level of the electronics. When the hob is used for a long time the speed of the cooling fan increases. As soon as the electronics have been cooled the fan stops automatically.

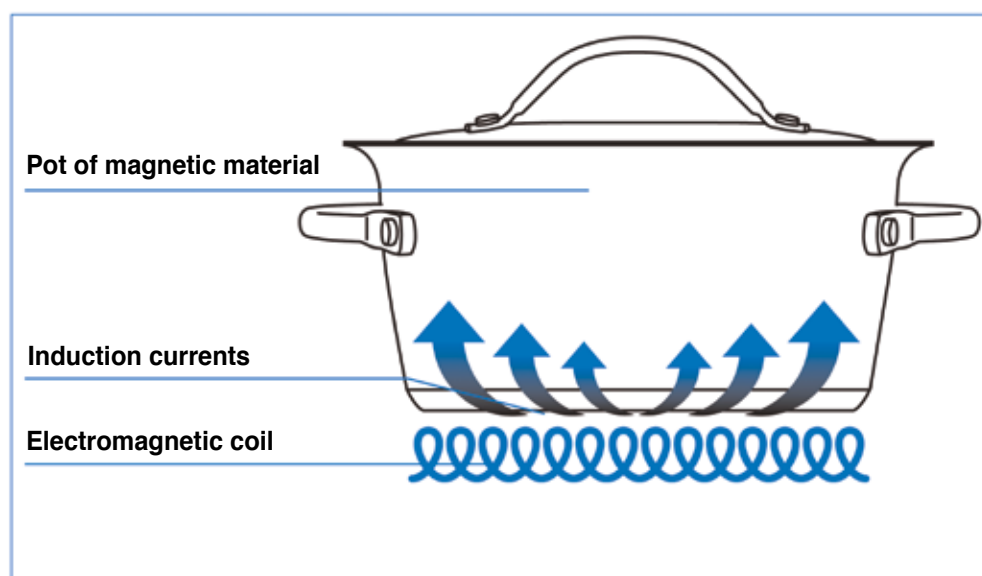
First switch-on

Clean the hob's surface with a damp cloth.

Induction

There is a coil underneath each cooking zone which, when a pot is placed on it, generates a variable electromagnetic field, producing inductive power of a ferromagnetic substance on the bottom of the pot. The end result is that the bottom of the pot placed above the cooking zone becomes heated. The type of material constituting the pot is fundamental:

- All pots with a ferromagnetic bottom are suitable (this can be verified with a magnet)
- The following pots should not be used: copper, stainless steel, aluminium, glass, wood, ceramics



Control description



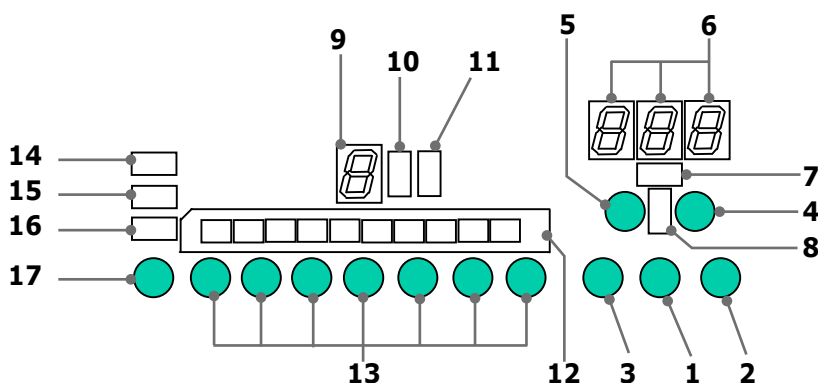
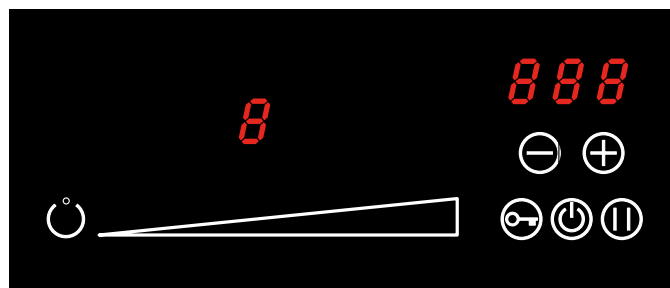
Zone	P1	P2	P3	P4	P5
Diameter Ø (mm) W x H (P4/P5, mm)	260	145	180	200x164	200x164
Power (watt)	2600	1400	1850	2100	2100
Booster (watt)	3700	2200	3000	3700	3700

Displayed functions

Displayed value	Description
0	Zero - the cooking zone is turned on
1-9	Level of power - select the cooking level
<u> </u>	Presence of pot - absence of pot or unsuitable pot
u	Heating function
A	Automatic heating - Function of automatic cooking
E	Error - Electronic anomaly
F	Error - Cooking zone anomaly
H	Residual heat - The cooking zone is hot
P	Booster - Excess power in the cooking zone
II	Pause - Pause active
U and Π	Merging two zones - the two zones become a unique zone (P4 and P5)

Control description

Functions



1	ON/OFF button
2	Break function key
3	Key function key
4	Control timer +
5	Control timer -
6	Timer Display (selected time)
7	Display icon min.
8	Display clock icon
9	Display cooking area
10	Display icon timer
11	Display merge cooking areas (zones merge)
12	Display slider (bar graph)
13	Slider (slider)
14	Level 3 heating function (95 ° C)
15	Level 2 heating function (70 ° C)
16	Level 1 heating function (42 ° C)
17	Heating function

Control description

Turning on appliance

Touch the ON/OFF button. 0 appears on the display to show the appliance is on. Once on, if no command is given, it will turn itself off after about 10 seconds. To turn the appliance off touch the ON/OFF button. The ON/OFF button is not affected by the live keyboard block.

Turning on a cooking area

After having turned on the hob select the desired cooking area by using the specific "slider". Running a finger along the slider, the desired power is set. The power value will be shown on the display of the corresponding area.

Turning off a cooking area

A cooking area can be turned off by pressing the slider's lowest point or by running a finger along the slider up to 0. If the area turned off is hot, the letter H will appear alternated with 0. If when turned off the area is still hot, just a fixed letter "H" will appear in the corresponding area.

Turning off all cooking areas

With more than one cooking area on, by touching ON/OFF all are turned off. If the areas are still hot a fixed letter H will appear on the cooking area displays.

Power levels

The cooking areas can be regulated from power level 1 to 9. The selected power will be shown on the cooking area display and slider display.

Booster "P"

The Booster guarantees a power increase to the cooking areas selected. With this function the plate works for 10 minutes under greater power. The Booster is suitable for heating large amounts of water in a short time. Touch the ON/OFF button. Run the finger over the desired area's slider to the end of its scale. The display shows a "P" and the function is working.

Joining two areas

It is possible to join the two right hand octagonal areas using a single slider, the maximum power that can be reached is 3700W. Turn the hob on, select the union of the two areas by pressing at the same time any point on the two sliders of the 2 areas. On the "cooking area union" display the icons U and Π will appear, on the right back area "0" will appear. At this point by still using the right back area's slider, set the desired power. With this setting the booster cannot be used.

Automatic turning off

Each cooking level has a maximum function cooking time. Having reached the maximum cooking time the area automatically turns off. The timer setting time has priority over the automatic turning off time.

Control description

Protection in case of accidental turning on

In case of accidental turning on where no button is pressed the hob turns off after 10 seconds. Water accidentally falling on the control panel is not detected by these controls' sensors. The ON/OFF button has priority over any other control.

Child safety

After having turned the hob on, it is possible to set the "child safety" function. To set this function touch buttons "key" and "pause" at the same time and then just the "key" button. "L" appears on all areas' display. At each turning on the "L" appears on the display showing that child safety is on, to use the hob press "key" and "pause" at the same time. To disable the child safety function touch the buttons "key" and "pause" at the same time and next just the "pause" button.

Timer function

An end of cooking can be programmed on each cooking area; a courtesy timer is also available on the hob independent of the cooking areas. The timer's operational field goes from a minimum of one minute to a maximum of 1 hour and 59 minutes. To set the timer the hob must be on. Once the courtesy timer is set it can work with the hob off. The "timer icon display" of a cooking area has a stronger light when the area's end of cooking time is shown on the "timer display". If a cooking end is programmed for more than one area the "clock icon display" shows a weaker light with respect to that of the area shown in the "timer display".

Timer starting

After having turned on the hob and selected a cooking area, press "+/-" buttons at the same time to start the timer (the "clock icon display" of the area to be programmed shows the clock symbol and the "timer display" shows "0.00"). Use the +/- buttons again to select the end of cooking time (if no command is given after 10" the timer display turns off). The timer starts counting after about 5 seconds from setting the cooking time. If more than one cooking areas have been programmed, the display shows the lesser programming time. Once the programmed time has elapsed it turns off and an acoustic warning is set off (by pressing button + or - the acoustic warning is turned off, if it is not turned off it stays on for 2 minutes). If the cooking area is hot when turned off "H" will appear on the display.

Courtesy timer

The courtesy timer is separate from the cooking areas. Once started the timer stays on even when the hob is off. After having turned on the appliance touch the "+/-" buttons at the same time ("clock icon display" appears). Subsequently touching the "+" button sets a time from 1 minute to 1 hour and 59 minutes. To zero the courtesy timer the hob needs turning on using ON/OFF, touch the timer's "+/-" buttons at the same time, then touch the "-" button to zero "0" the timer.

"HEAT-UP" function

The Heat-up function can be set on all areas from power level 1 to level 8. When the function is on the cooking area's power is increased by 100% for a period dependant on the selected power. Once this time is up the power is automatically taken back to the set level. To start the automatic heat-up function select the power level using the slider holding it there for 3 seconds. The display will show an alternating letter "A" with the previously selected power. The automatic heat-up function is on.

Control description

Pause

The pause function can be used when at least one cooking area is on.

Turn on the cooking areas and bring them to the desired power level. To set the pause function touch the "pause" button. The "II" symbol appears on all the cooking areas' displays. With the pause function on, all the areas will turn themselves off and all timer settings including the courtesy timer will be blocked. The pause function has a maximum duration of 10 minutes; once the maximum time has elapsed the function shuts itself off. The ON/OFF command remains active even with the pause function on. To disable the pause function press the "pause" button anew and run the finger along the centre back area's slider within 10 seconds. Sliding will start the cooking areas up again, with the previous setting (if this does not happen within 10 seconds the pause function remains on).

Recall function

After having turned the hob off it is possible to turn it back on with its initial settings by using the ON/OFF button again within 6 seconds and subsequently touching the "pause" (flashing) button. The recall function can be turned back on even if the "key block" or "child safety" functions have been set.

Heating to 42°C, 70°C, 95°C function

The heating function is used to keep cooked foods hot. Each area has a dedicated button ("heating function"). By touching the specific button the "u" icon appears on the "cooking area display", the "heating function level 1" display lights up and the temperature on the inside of the pan's base does not exceed 42 °C. It is possible to select 3 temperature levels (42°C, 70°C, 95 °C) which can be seen on the specific "heating function level" display. If the "heating function" command is touched when at level 3 the interested area turns itself off. The function can also be turned off by using the cooking area's slider.

Pan presence recognition

Pan detection ensures proper working. The induction hob does not work if:

- The pan does not rest on the turned on cooking area, the pan is not suited to an induction system. In these cases, the U symbol appears on the display.
- If the pan is removed during cooking, the U symbol appears on the display. If the pan is then returned to the same cooking area, the hob continues working at the same preset power.

Residual heat indication

After turning off the cooking areas or the entire hob, if the cooking area is still hot the display shows a static "H" symbol. Take care not to touch the cooking area and not to put inflammable objects on it.

Key blocking/unblocking

Touch the "key" button for 2 seconds to block the keys (the ON/OFF button is not blocked). Blocking is signalled by warning light (situated over the key button). Touch the "key" button again for 2 seconds to unblock the keys.

Power management

In case the booster function is used, power management happens in the following way: the more recent power setting has priority over the other areas. In order not to exceed the maximum useful power, the electronics automatically reduces the power in the other areas taking them down to a lower level. During this stage the "cooking area display" flashes for 3 seconds and then stops on the power level managed by the electronics.

Control description

Overheating

The induction hob is fitted with a system against overheating split into 3 different temperature levels. If during operation, a cooking area overheats excessively (first temperature level), power is automatically reduced and the "cooking area display" shows the just altered new level. If the controlling electronics overheat excessively (second temperature level) the power is further reduced but not shown on the "cooking area display". Lastly, with the third level the hob shuts down automatically and the relevant cooking area display shows the warning E2.

Limit of the duration of operation

A maximum time of continuous operation is associated with each cooking area. This depends on the set power level. If the limit of the duration of operation is reached, the respective area is switched off.

Limit of the duration of operation table

Level	Duration (hour)	Power (%)
Heating function 42 °C	8	2,5
Heating function 70 °C	8	2,5
Heating function 90 °C	8	2,5
1	8.5	3
2	6.5	5
3	5	8
4	4	12
5	3.5	18
6	2.5	28
7	2	42
8	1.5	64
9	1.5	100

Advice when cooking

Pots

Suitable materials: steel, enamelled steel, cast iron, ferromagnetic steel, aluminium with ferromagnetic bottom.

Unsuitable materials: aluminium and steel without a ferromagnetic bottom, copper, ceramics, porcelain, glass, brass.

In order to verify compatibility of a pot, place a pot containing a minimum amount of water on the cooking zone. Setting the knob at "9", the water should boil in just a few seconds.

Try with a magnet on the bottom of the pot.

Some pots make "noise" while in use on the hob. This does not derive from the induction surface and does not affect cooking.

Size of pots

The cooking zones automatically adapt to the size of the pots. Nonetheless, the bottoms of these pots should be at least a certain diameter in order to work properly. For the best results, place the pot at the centre of the cooking zone.

COOKING CHART (the values indicated below are purely indicative)

Position	Cooking type	Foods
1..2	heating/melting	butter, sauces, chocolate, jelly
2..3	slow boil/defrosting	rice, pudding, glazes, fish, meat
3..4	slow cooking	vegetables, meat, fish
4..5	steam cooking	potatoes, soups, pasta, vegetables
6..7	medium cooking	meat, eggs , sausages, stews
7..8	cooking	potatoes, fried foods
9	boiling water/browning/roasting	steaks, omelettes
P	boiling water/browning/roasting	steaks

Maintenance and cleaning

- Switch the appliance off before cleaning it.
- Do not clean the glass while it is still hot; you could burn yourself.
- Remove small stains with a damp cloth and then finish off with a dry cloth.
- Do not use corrosive or abrasive products to clean the appliance.
- Do not use any object that could ruin the glass-ceramic surface.
- Make sure that the bottom of the pot is dry and clean and that the glass surface is not dirty. Moving the pot could scratch the glass.
- Immediately remove any sugar, gelatine or marmalade to prevent damage to the glass.

Controls to carry out in case of malfunction

Anomaly	Causes
The appliance and the hob do not switch on	<ul style="list-style-type: none"> • The hob has not been properly connected to the electrical network. • The protection fuse is broken. • The safety key has been turned on. • The "key" knob is greasy or covered by water. • An object is leaning on the "key" knob.
The "U" symbol appears on the display	<ul style="list-style-type: none"> • The pot was not placed on the cooking zone. • The pot is not compatible with induction. • The diameter of the bottom of the pot is too small.
The "F" symbol appears on the display	<ul style="list-style-type: none"> • The cooking zone is unusable. • Contact the authorized service centre.
The "E" symbol appears on the display	<ul style="list-style-type: none"> • Electronic system is defective. • Disconnect the hob from the electrical network. • Contact the authorized service centre.
The cooking zones do not work	<ul style="list-style-type: none"> • The safety system is in operation. • Check whether one or more knobs may be covered. • The pot is empty and the bottom has overheated.
If ventilation remains on when the hob is switched off	<ul style="list-style-type: none"> • This is not a malfunction. The ventilator continues to function to protect the electronics. • The automatic ventilation will stop automatically.

Installation



Respect for the environment

Packaging material is ecological and can be recycled.

The appliance contains noble metals. Current regulations apply to recycling.

When the time comes to scrap your appliance, you should utilize the various options for disposal provided by your dealer and/or by your local authorities; remember that prior to scrapping the appliance you should make sure that it is not useable.

Instructions for installation

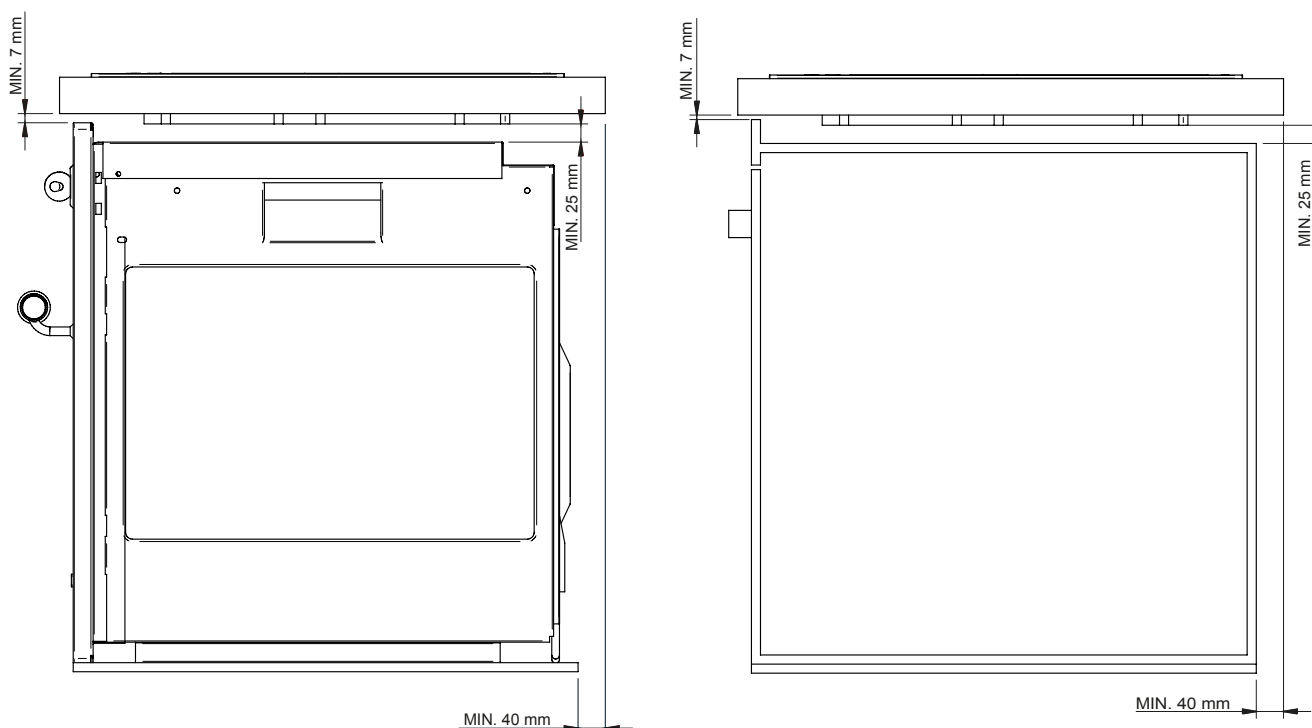
Installation should be performed only by qualified personnel. The technician should be aware of current regulations.

The gasket provided with the hob will prevent liquids from leaking between the hob and the cabinet. Carefully apply the gasket 2 mm from the edge of the glass.

The dimensions of the inset area are 870 x 480 mm

The gasket provided with the hob is sufficient to cover the perimeter of the inset area. Its glue resists to a temperature of 100 °C. The hob is in class "Y". It is advisable to leave the adjacent walls free when installing the hob. Nonetheless, placing a single side wall and a back wall is allowed. The walls should be kept at a minimum distance of 40 mm. The inset surface, if subject to any water leaks, should be protected primarily along the border of the inset perimeter with paint. Do not install the hob above a static oven or above a dishwasher. Make sure that there is at least 25 mm space underneath the hob to facilitate proper ventilation. Make sure that there is at least 7 mm between the working zone and the upper border of any drawers or ovens to guarantee that air is not trapped within. Do not place any inflammable objects inside the draw located under the hob. The distance between the hob and the cooker hood must comply with the indications provided by the maker of the cooker hood. Should indications not be provided, comply with the minimum distance of 760 mm. Once installed, the connecting cable should not be subject to stress or tension. Installation of the hob in mobile environments (such as boats) should only be performed by specialized personnel.

Built-in scheme



Installation

Electrical connection

Installation of the induction hob should be performed by specialized personnel and carried out in compliance with current regulations. Make sure that the parts in tension underneath the hob are protected. The outline for the electrical connection is indicated on the label near the terminal board. In case of direct connection to the network it will be necessary to interpose an omnipolar switch with a minimum opening between the contacts of 3 mm. Connection to the electrical network must be separated by the appropriate interruption: switch, fuse.



**Always connect the earthing cable.
Comply with the connection instructions.
The terminal board is located under the hob at the back. Use a screwdriver to open the cover of the terminal board.**

Connecting cable to hob

With respect to the various types of connection, you should utilize the appropriate jumpers placed inside the jumper board.

MONOPHASE: connect the jumper to clamps 1-2 and 2-3. The phase should be connected to clamp 1 or 2. The neutral should be connected to clamps 4-5.

2 PHASES + N: connect the jumper to clamps 2 or 3 and between clamps 4-5, one phase to clamp 1 and one phase to clamp 2 or 3.

3 PHASES + N: connect the jumper to clamps 4-5. Connect the neutral to clamp 4 or 5, one phase to clamp 1, one phase to clamp 2 and one phase to clamp 3.

Electrical cable table

POWER	CONNECTIONS	WIRING	TYPE OF WIRING	FUSES
230V a.c. 1P+N 50Hz	1 phase + N	3 x 6 mm ²	H07RN	25 A*
400V a.c. 2P+N 50Hz	2 phase + N	4 x 2,5 mm ²	H05RR	16 A*
400V a.c. 3P+N 50Hz	3 phase + N	5 x 1,5 mm ²	H05RR	16 A*

(*) calculated using the coincidence factor 60 335-2-6

The manufacturer will not be held liable for any damages due to improper electrical connections

Note

