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Manual Cooking boiler



BKKD50, BKKD80, BKKD100, BKKD150

BEKKD50, BEKKD80, BEKKD100, BEKKD150

Be **sure to** read **the** instructions for use **and assembly**
before installation - installation - commissioning.
This protects you and prevents damage.

Table

Table	1
Safety.....	3
Safety regulations	4
Description of Hazard Symbols.....	4
Dangers in case of non-compliance with safety regulations.....	4
Safe use.....	4
Safety regulations for operators	5
Improper operation	5
Changes / use of spare parts	5
General.....	6
Application	6
Product	6
Products.....	6
Technical data	6
Operation and control	6
Technical device data.....	6
Functional conditions	7
Installation	7
Electrical data of the devices (14.0 kW)	7
BKKD50, BEKKD50	7
Electrical data of the devices (18.0 kW)	7
BKKD80, BEKKD80	7
Electrical data of the devices(21,0 kW)	7
BKKD100, BEKKD100	7
Electrical data of the devices (26.0 kW)	7
BKKD150, BEKKD150	7
Installation pre-conditions	8
Installation regulations	8
Commissioning	8
Electrical assembly	8
Water connection	9
- the regional regulations and the technical rules for drinking water installations (DIN EN 1717) must be observed!	9
Overpressure	9
3-Step main switch.....	10
Water supply (mixed battery)	10
Safety emptying valve	11
Operation.....	12
Cooking process.....	12
Cleaning and care	12
Warnings	12
Notes on stainless steel.....	12

Cleaning and care products	13
Cleaning housing and boilers	13
Disassing and cleaning the outlet valve.....	13
Decommissioning	13
Troubleshooting	14
List of spare parts	15
Maintenance	15
Disposal	16
Repair during the warranty period	16

Safety



Read this guide carefully. Keep the instructions for use and assembly for later use or for subsequent owners. Check the device after unpacking. Do not connect in the event of transport damage. Record the damage in writing and call the customer service, otherwise the warranty claim will not be waived. The installation of the device must be carried out in accordance with the attached installation instructions.

Use the device only for preparing food. Supervise the device during operation. Use the device only indoors. Do not use covers. They can lead to accidents, e.B. due to overheating, inflammation or cracking materials. Do not use unsuitable protective devices or child protection screens. They can lead to accidents. This device is not intended for operation with an external timer or remote control.

Fire!

- Do not fill the boiler with oil or grease. Hot oil and fat ignite quickly. Never leave hot oil and grease unattended. Never extinguish a fire with water. Turn off the device. Carefully suffocate flames with lid, extinguishing blanket or similar.
- The heaters get very hot. Never place flammable items in or on the device. Do not store any items on or in the device.
- The device gets hot. Store non-flammable objects or spray cans in sheds directly under the boiler.

Risk of combustion !

- The device and its surroundings, in particular a possible installation frame, become hot. Never touch the hot surfaces. Keep children away.
- The unit heats to 100°C. Do not touch content. Keep children away. Danger of scalding!
- Metal objects get hot very quickly in the basin. Never place metal objects such as knives, forks, spoons and lids in the pool.
- After each use, turn off the device with the main switch. Do not wait for the device to turn off automatically because there is no more water in it.
- The device is secured against over pressure and vacuum pressure in the inner pocket with various safety devices (pressure switch, overpressure valve, vacuum breaker). In the event of an error, hot steam may leak in the socket area of the device!

Risk of electric shock !

- Improper repairs are dangerous. Only a customer service technician trained by us is allowed to carry out repairs and replace damaged connecting lines. If the device is defective, pull the power plug or switch off the fuse in the fuse box. Call customer service.
- Invading moisture can cause an electric shock. Do not use a high-pressure cleaner or steam cleaner.
- A defective device can cause an electric shock. Never turn on a defective device. Pull the power plug or turn off fuse in the fuse box. Call customer service.
- Jumps or cracks in the cover can cause electric shocks. Switch off the fuse in the fuse box. Call customer service.

Damage!

- The device is equipped with a safety thermostat. Observe the installation requirements for installing the safety thermostat.

Attention!

- Rough detergents and objects scratch the device and pelvis.
- Never put the device into operation without water. This leads to damage and defect of the device.
- Do not place hot items on the control panel, displays, or hob frame. This could lead to damage.
- If hard and pointed objects fall on the device, damage can occur.
- Aluminum foil and plastic vessels melt on hot surfaces. The use of anti-stove film is not recommended.

Safety regulations

Description of Hazard Symbols

General danger symbol

**Failure to comply with safety regulations
means danger (injuries)**



This symbol warns of **dangerous tension**.
(Figurine 5036 of IEC 60417-1)

Attention

**In case of improper use
may cause minor injuries or
damage to property!**

Danger symbols directly attached to the device must be followed and readability must be ensured at all times.

Attention

**The user manual must be read before using or
maintaining the device.**

Dangers in case of non-compliance with safety regulations

Failure to comply with the safety regulations can endanger people, the environment and the device itself. In the event of non-compliance with the safety regulations, there is no right to claim any damages.

In detail, failure to observe the following risks may result in the following risks

(Examples):

- Danger to persons due to electrical causes
- Gefahr for people due to overheated device
- Gefahr for people due to overheated pelvis
- Gefahr for people through hot water

Safe use

The safety regulations of this manual, the existing national regulations on electricity to prevent accidents and any internal working, application and safety regulations must be followed.

Safety regulations for operators

- **Attention!** Do not fill or clean the device in hot condition with cold water/ice. Ignoring this notice may damage the device. **Effect in ignoring:** Basin is deformed, tearing of the joint material due to extreme temperature fluctuations and thus destruction of the seal, leads to penetration of moisture and grease and can thus lead to the defect of the device.
- If the seal is torn, the device must be switched off and disconnected from the electrical supply. Do not touch any parts inside the device.
- The device is heated by the inner pocket filled with soft water by means of pipe radiators. To avoid injuries (burns), do not touch the inside of the pelvis.

Please be wareify against hot food and liquids.

- **PLEASE NOTE:** Warning of possibly slippery ground in the vicinity of the device. This can lead to injuries.
- To avoid overheating of the pools by empty boiling, do not heat the device unattended and without water.
- Turn off the device when not using it for awhile. This prevents the process from automatically using. Thus, an unattended heating is avoided, i.e. a person who wants to use the device must start the heating process by holding the device or by deering the power controller to 'ON'.
- Do not use the device as a shelf!
- Do not place any paper, cardboard, fabric, etc. in or on the device as it may ignite. Aluminium foils and plastic vessels must not be placed in or on the device.
- Care must be taken to ensure that during the operation of the device, items worn by the user, such as B rings, watches, etc., can become hot when they come close to the cooking level.
- After use, the device must be switched off by means of its control and/or control device.
- Do not place credit cards, phone cards, cassettes or other sensitive items in or on the device.
- Only recommended types and sizes of vessels may be used.
- Avoid the entry of liquids into the device and overflow water or cooking material over the edge. Do not clean the device with a water jet.

Improper operation

The functionality of the device can only be guaranteed if used correctly. The limit values in accordance with the technical data may not be exceeded or exceeded under any circumstances.

Changes / use of spare parts

Contact the manufacturer if you intend to make changes to the device. To ensure safety, use only original spare parts and accessories approved by the manufacturer. When using non-original components, all liability for follow-up costs expires. **When disassembly, testing or repairs, pay attention to the stability of the device.**

Attention! When using spare parts, the device must be "visibly disconnected" from the power supply.

General

This manual contains basic information that must be observed during assembly, application and maintenance. It must be read completely by the installer and the operating personnel before installation and commissioning, and must always be available near the boiler for a look-up.

Application

The cooking boiler may only be used for the preparation of meals.

Product

Products

BKKD50, BKKD80, BKKD100, BKKD150, BEKKD50, BEKKD80, BEKKD100, BEKKD150

- Fast heating-up time
- Lice control by means of tap-changers and energy regulators
- Easy operation with rotary knob

Technical data

Operation and control

BKKD50, BKKD80, BKKD100, BKKD150

Knob "0-I-II-III"	black	power and tap	changer	
Lamp "Operation"	green		"AN" when operating the device	
Knob "0-10D"	black	energy	regulator	
Lamp "Heating on"			yellow	"AN" when operating the heating
Manometer "0-1.0 bar"			chrome	print in the inner pocket
		Water valve "Cold water"		chrome/blue cold water inlet
		Water valve "hot water"	chrome/red	hot water inlet

BEKKD50, BEKKD80, BEKKD100, BEKKD150

Knob "0-I-II-III"	black	power and tap	changer	
Lamp "Operation"	green		"AN" when operating the device	
Knob "0-10D"	black	energy	regulator	
Lamp "Heating on"			yellow	"AN" when operating the heating
Manometer "0-1.0 bar"			chrome	print in the inner pocket

Technical device data

Dimensionen External dimensions B x T x H Internal dimensions x T Use able _____ to

BKKD50	700 x 700 x 850/900 mm	500 x 348 mm	50 litres
BKKD80	700 x 700 x 850/900 mm	500 x 448 mm	80 liters
BKKD100	800 x 850 x 850/900 mm	600 x 390 mm	100 litres
BKKD150	800 x 850 x 850/900 mm	600 x 515 mm	150 liters
BEKKD50	700 x 700 x --- mm	500 x 348 mm	50 liters
BEKKD80	700 x 700 x --- mm	500 x 448 mm	80 liters
BEKKD100	800 x 850 x --- mm	600 x 390 mm	100 liters
BEKKD150	800 x 850 x --- mm	600 x 515 mm	150 liters

Device Voltage Switch Power Weight

kW	90	BKKD50 400V/3/N/PE	kg	3-Levels	0-I-II-III	4.6/9.4/14,0	
kW		BKKD80 400V/3/N/PE	kg	3-Levels	0-I-II-III	6.0/12.0/18,0	
kW		BKKD100 400V/3/N/PE	kg	3-Levels	0-I-II-III	7,0/14,0/21,0	
kW		BKKD150 400V/3/N/PE	kg	3-Levels	0-I-II-III	8.6/17.4/26,0	
		BEKKD50 400V/3/N/PE	3 levels	0-I-II-III		4.6/9.4/14,0 kW	kg

BEKKD80400V/3/N/PE 3-levels 0-I-II-III	6.0/12.0/18,0 kW	kg
BEKKD100400V/3/N/PE 3-levels 0-I-II-III	7.0/14.0/21,0 kW	kg
BEKKD150400V/3/N/PE 3-levels 0-I-II-III	8.6/17.4/26,0 kW	kg

Functional conditions

- max. tolerance of mains voltage nominal voltage +5%/-10%
- Frequency 50 / 60 Hz

Attention protection class in the delivery stand

BKKD50, BKKD80, BKKD100, BKKD150 - IP3→3

BEKKD50, BEKKD80, BEKKD100, BEKKD150 → IP11

Installation

Electrical data of the devices (14.0 kW)

BKKD50, BEKKD50

3-phase (voltage 400V/3"/N/PE +5% / -10%)

Connection	Color	min. supply line	Min. Fromsiation
Control voltage	Brown, Black	5G4mm2	3-pole 25A
Phase	Brown, Black, Grey or 1, 2, 3		
N	Blue or 4	Frequency	Taxing
Pe	Yellow/Green	50 / 60 Hz	B6A

Electrical data of the devices (18.0 kW)

BKKD80, BEKKD80

3-phase (voltage 400V/3"/N/PE +5% / -10%)

Connection	Color	min. supply line	Min. Fromsiation
Control voltage	Brown, Black	5G6mm2	3-pole 32A
Phase	Brown, Black, Grey or 1, 2, 3		
N	Blue or 4	Frequency	Taxing
Pe	Yellow/Green	50 / 60 Hz	B6A

Electrical data of the devices(21,0 kW)

BKKD100, BEKKD100

3-phase (voltage 400V/3"/N/PE +5% / -10%)

Connection	Color	min. supply line	Min. Fromsiation
Control voltage	Brown, Black	5G6mm2	3-pole 32A
Phase	Brown, Black, Grey or 1, 2, 3		
N	Blue or 4	Frequency	Taxing
Pe	Yellow/Green	50 / 60 Hz	B6A

Electrical data of the devices (26.0 kW)

BKKD150, BEKKD150

3-phase (voltage 400V/3"/N/PE +5% / -10%)

Connection	Color	min. supply line	Min. Fromsiation
Control voltage	Brown, Black	5G10mm2	3-pole 50A
Phase	Brown, Black, Grey or 1, 2, 3		
N	Blue or 4	Frequency	Taxing

Pe	Yellow/Green	50 / 60 Hz	B6A
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Installation environment

- **Maximum ambient temperature**

Storage > -0°C to +70°C in function > +5°C to +35°C

- **maximum relative humidity**

Storage > 10% to 90% in function > 30% to 90%

Installation pre-conditions

The device must be installed (placed) in a straight surface. The installation area shall allow at least the weight of the device plus the weight of the user content. The mains disconnector must be easily accessible.

The safety thermostat is accessible to be installed in the substructure.



Installation regulations

The following points must be observed:

- Check and make sure that the voltage of the main supply line matches that of the type plate.
- The electrical installations must comply with local building installation regulations. The applicable national regulations of the electricity authorities must be complied with.
- The device is equipped with a power cable, which can be connected to a socket or junction box with the cable or necessary plug.
- If incorrect current circuit breakers are used, they must be designed for a fault current of at least 30mA.
- Operators must ensure that all installation, maintenance and inspection work is carried out by approved personnel.

For the electrical connection of the device, the legal regulations of the respective country must be observed!

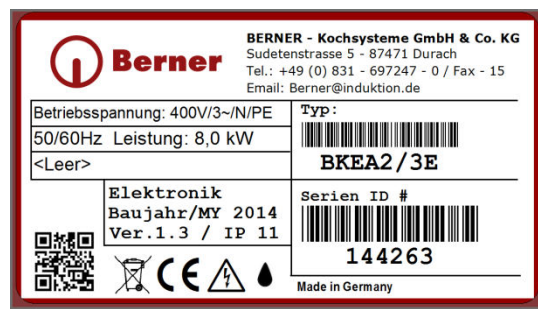
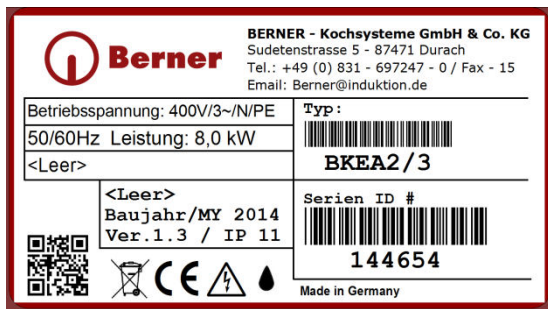
Attention
Incorrect voltage can cause the
Damage the device

Attention
The electrical connections must be
replaced by a specialist
executed.

Commissioning

Electrical assembly

The device is equipped with a power cord. This can be connected to a junction box or plugged in. Run the ports according to the installation regulations. The electrical installations must be carried out by approved installers in compliance with specific national and local regulations. The installers are responsible for the correct design and installation in accordance with the safety regulations. The warning and type plates must be strictly followed. Check and make sure that the voltage of the mains current and the device is (according to the type plate).



Water connection

	Cold	Hot	Steam
Temperature		maximum 60°C	
Hardness	Maximum 10° dH	Maximum 10° dH	Maximum 5° dH
Pressure	at least 2 bar dynamic	at least 2 bar static	at least 2 bar
	maximum 6 bar dynamic	maximum 6 bar static	maximum 6 bar
Connection	1/2" AG	1/2" AG	3/4" IG

- the regional regulations and the technical rules for drinking water installations (DIN EN 1717) must be observed!
- Flush the water pipes and inlet hoses on site before commissioning
- a shut-off valve is easily accessible at the connections for cold and hot water as well as to the steam generator (inner pocket)
- no pipe made of galvanized iron pipes or similar material may be used between the water softener and the boiler, otherwise there is a risk of rust!
- Observe the instructions for use and installation of the water softener used
- The inlet hoses must not be flattened or bent
- Check all connections (even internally) for tightness

Overpressure

The device is secured with several protective devices against overpressure in the steam generator. In the event of a fault, these must derive the resulting overpressure unhindered! In the case of stand-up equipment, a discharge over the ground is provided for this purpose. This is located in the front area of the device and must NOT stand on or behind the base when mounting the socket. If necessary, appropriate measures shall be taken on the construction side.

In the case of built-in devices, the installer of the system is responsible for a corresponding, standard-compliant derivation!

When installing this appliance in the immediate vicinity of a wall, partition walls, kitchen furniture, decorative cladding, etc., it is recommended that these are not made of combustible material; otherwise, they must be clad in suitable non-combustible, heat-insulating material, and fire safety regulations must be observed with the most care.

Rotate the device switch and power knob to OFF position (0) before connecting the device to the power supply.

The requirements according to the "Installation Prerequisites" heading must be met

Controls

3-Step main switch

Position OFF:

'0' points to the selection (A)



Position ON:

I, II, III shows for marking (A)power level shows for marking (A)
selected power level 'III', 'II', 'I'



I
1/3 Power



II
2/3 Power



III
full power

Energy regulator

position between 0 and 10, marks the current position of the energy regulator knob.
The snapping position "D" stands for continuous operation.

Position Heating OFF: Position Heating ON:

'0' indicates the marking (A)Each position that is used to mark the
)shows. (1) to (D)



Water supply (mixed battery)



Hot water



cold water

Safety emptying valve



Open tap

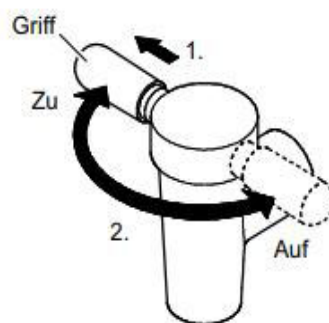


Attention! The outlet tap is hot! Splashing hot liquids!

Risk of combustion!

Wear protective gloves, use pot holders!

Before opening the tap, turn off the device!



Tap open tap close

- Pull handle (1)
- in the pulled state grip against - turn clockwise (2)

outwards - turn handle clockwise to stop
Allow the handle to snap in

Functional

Before performing the functional test, the user must know how to operate the device.

Remove all items from the heating zone (basin). If the device has a defect, stop commissioning immediately. Turn off the device immediately and disconnect the power plug or switch the device off without voltage.

The boiler must not be put into operation under any circumstances without water, the steam generator (inner pocket) of the appliance must be filled with soft water!

Open the lid of the device and turn the water inlet valve over the boiler. Press the mixing battery on the front side to fill the device with water at least until the minimum mark. After the 3-stage main switch has been switched on for the first time, the inner pocket (steam generator) fills with soft water. After switching on the energy regulator, the heat heats up as soon as the ideal water level in the steam generator is reached.

The heating can be adjusted by means of 3-stage main switches and energy regulators. The energy controller clocks the heating at different lengths of time, depending on the setting.

The device only works with a filled steam generator!

Attention

The heating (under the boiler) is heated strongly. To avoid injury, do not touch the inside walls of the boiler.

If the heating lamp (yellow) remains off check the following:

- Is the device connected to the power supply or main switch on?
- Is the 3-stage main switch at position I, II or III?
- Is the energy controller between level 1 and "D"?
- Is the steam generator (inner pocket) filled with soft water?

Operation

Cooking process

Fill in sufficient amount of water (at least up to minimum marking). These are not undercommented under any circumstances. Select the desired power using 3-stage main switches and energy regulators. The device starts operation, which is indicated by the two lamps. The illuminated power indicator light indicates (green) the operation of the device. The luminous lamp (yellow) indicates the operation of the heating system. Depending on the setting of the energy controller, the heating clocks at variable intervals.

green lamp device in "operation"

yellow lamp heating "on" (clocked)

Cleaning and care

Warnings

Attention!

- Do not bring corrosive cleaners to the control panel and switch gag!
 - Do not clean the device with water hose, high pressure cleaner or steam cleaner!
- Do not leave the cleaning agent in the device for more than 15 minutes.
 - do not use abrasive cleaning agents!
 - Observe the instructions for use of the cleaning agent manufacturer!

Notes on stainless steel

- Even high-quality stainless steel can corrode due to improper treatment. Salts, acids, chlorine, iodine and residues from food destroy the protective layer and can lead to corrosion and pitting!

- the surface of the stainless steel immediately forms a protective layer after damage, but only if air or oxygen-rich water can act on the surface
- if residues such as lime, protein or starch are not completely eliminated, no protective layer can form and corrosion occurs. Therefore, clean the device in such a way that no residues are attached.

Cleaning and care products

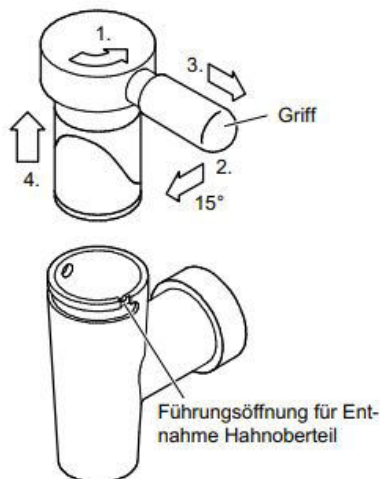
You can obtain suitable cleaning and care products from your customer service or specialist retailers. These are, for example:

- fat-releasing detergents
- special stainless steel cleaner
- Grill cleaner for stainless steel
- Preservative stainless steel care products

Cleaning housing and boilers

- empty the device and allow it to cool down
- Thoroughly clean with water, grease-soluble cleaner and rinsing brush
- Remove deposited lime with vinegar or lime-releasing detergent (note from the manufacturer!)
- Open the outlet valve, and disassemble, clean and grease as described
- dry rub clean parts and surfaces with a soft cloth

Disassembling and cleaning the outlet valve

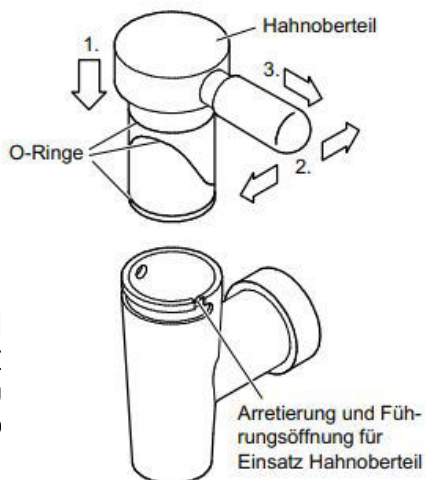


Remove the rooster top

1. Open the outlet valve completely
2. Turn the rooster top 15° back clockwise
3. Pull grip to stop and hold
4. Pull the rooster top out to the top

Cleaning and care

- Clean the outlet tap and the rooster top inside and outside
- rinse the cleaned parts and surfaces with clear tap water and rub dry with a soft cloth
- Check O-rings (seals), replace them if necessary
- To ensure that the outlet valve remains smooth and dense, grease the rooster top thinly with food-safe fat.



Use the rooster top

- Insert the rooster top in the lower part of the rooster
- Turn the rooster top handle side back and forth in the area of the guide opening until the rooster top snaps into place and can no longer be twisted
- Pull on the handle, pushing the rooster top down
- Release handle and turn clockwise to stop
- if the rooster top is properly inserted and closed, the handle must be fully snapped

sure that the main switch or power knob is not turned on device for an extended period of time (several days), unplug sure that no liquid can enter the device.

Error detection

Attention

**Do not open the device!
Dangerous tension!**

In the event of any interference with the device that does not affect external influences or contamination,- are only allowed to Course-let's and trained service personnel open the device. The device must be switched off immediately and the power

plug removed-or switched off without voltage. The cause determination or error-removal may only be carried out by experts.

Troubleshooting

Disorder	Possible cause	Remedy
When switched on, the green operating lamp does not light up	Mains voltage is missing	Check on-site fuses
The device is switched on, the energy controller is between 1 and "D", the yellow control ramp lights up, the device does not heat	There is too little or no water in the steam generator	Control inlet possible level adjustment errors, have the device checked by an authorized customer service
	one or both safety temperature limiters have triggered	Have your device checked by an authorized customer service
	Pressure in the steam generator too high	Check the pressure gauge, turn off the device at a pressure of 0.5bar and allow to cool down. If the error occurs again, have the device checked by an authorized customer service
	Pressure switch defective	Have your device checked by an authorized customer service
	Heating defective	Have your device checked by an authorized customer service
The device has too low heating capacity	one or both safety temperature limiters have triggered	Have your device checked by an authorized customer service
	one or two phases are missing	On-site fuses, if necessary: Have the device checked by an authorized customer service
	defective power contactor	Have your device checked by an authorized customer service
	Heating defective	Have your device checked by an authorized customer service

When replacing components, original parts must always be used according to the valid list of spare parts and the original existing **elements must be used; this also applies to the assembly of outer housing parts, such as .B.dem front plate.**

List of spare parts

Label	Article	Number
Safety temperature limiter 157°C	800422	2
Four-stroke switch	800413	1
Energy regulator	800400	1
Contactor 25A 2S	800319	3
Switching power supply 24VDC 2W	200537	1
Level probe LBFS	300094	1
Cable with plug for level probe	300095	1
SSR Relay 24VDC	800346	2
Circuit breaker B6A	300120	1
Pressure switch 0.5bar	800430	1
Solenoid valve 230V 1/2" / 3/4"	300114	1
Display lamp green 250V	800201	1
Display lamp yellow 250V	800206	1
Heaters	7kW BKKD50, BEKKD50	2
	9kW BKKD80, BEKKD80	2
	10.5kW BKKD100, BEKKT100	2
	13kW BKKD150, BEKKD150	2
Mixed battery Water einaluf	500430	1
Inlet fitting	500432	1
Run-out valve	500431	1
Vacuum breaker	800431	1
Traps	800432	1
Safety valve 0.6bar opening	800433	1
Manometer G1/8" 0 - 1.0 bar	100470	1

Maintenance

The user must ensure that all components relevant to safety are functional at all times. The device must be inspected at least once a year by a trained technician from your supplier.



The device may only be opened by trained service personnel.

Attention! For technical control, the device must be **"visibly disconnected"** from the power supply.

Disposal

When the service life of the device is terminated, it must be disposed of professionally.

Avoid abuse:

The device must not be used by unqualified persons. Avoid recommissioning the device provided for disposal. The electrical device consists of common electrical, electromechanical and electronic components. No batteries are used. The user is responsible for the professional and safe disposal of the device.

Note on disposal

Devices intended for this purpose can be sent to us for disposal. Only enough prepaid packages are accepted by us.



Guarantee

You have purchased a high-quality product with a Bernese cooking appliance. We offer a guarantee of one year from the date of purchase.

Repair during the warranty period

Please contact your specialist wholesaler.

Technical documents

Installation drawings, spare parts lists, user manuals and CE declarations finden they under:

www.induktion.de  www.induktion.de/download.html

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