SERVICE-MANUAL

INDUCTION COOKERS

BASE-LINE/INSTALL-LINE/WOK-LINE

BH/BA 1500 BH/BA 1800 BH/BA 2300 BH/BA 2500 **BH/BA 3000 BH/BA 3500 BH/IN 2500** SH/BA 3500 **SH/BA 5000 SH/IN 3500 SH/IN 5000 SH/WO 3500 SH/WO 5000 SH/WO 8000 SH/WO/IN 3500 SH/WO/IN 5000 SH/WO/IN 8000**



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1 Safety

1.1 Description of danger signs



This symbol identifies the safety information which may cause danger (personal injury) for people at non-observance of proper operation.



This dangerous voltage warning symbol indicates a risk of electric shock and hazards from dangerous voltage.

CAUTION

Indicates a hazard or unsafe practice which could result in minor personal injury or property damage.



Electromagnetic field

Information signs mounted directly on the cooker must be observed at all times and kept in a fully legible condition.

1.2 Qualification and training of personnel

The staff for assembly, installation, commissioning, operation and maintenance must have the appropriate qualification. The field of responsibility, competence and supervision of the staff must be defined and controlled.

1.3 Safety prescriptions for installation and service

The operating personnel has to make sure that installation and service as well as all inspection is done by authorized and qualified personnel. This personnel must have read very carefully the "Instructions for use" in order to meet the requirements. For installation, service, maintenance, repair and overhaul of the induction cookers, the personnel has to be specially qualified and must have attended a special training, authorized by the manufacturer.

In principle, such work at induction appliances must only be carried out when it is under no electrical tension. The cookers must be switched off and disconnected from the electric

connection. The installation of safety and protection must be re-installed after finishing the work.

1.4 Unauthorized reconstruction and use of spare parts

Reconstruction of the cooker or changes to the cooker are not allowed. Contact the manufacturer if you intend to do any changes to the cooker. To guarantee safety, use genuine spare parts and accessories authorized by the manufacturer. The use of other components will cancel any liability for the resulting consequences.

1.5 Improper operating methods

The operating reliability of the cookers can only be guaranteed with appropriate use of the cooker. The limit values may be exceeded on no account.

2 Technical information

Modell BH/BA	120 V/1 Ph	208 V/1 Ph	230 V/1 Ph	240 V/1 Ph
Wattage kW	1.5/1.8	2.5/3/3.5	2.3/2.5/3/3.5	2.5/3 /3.5
Current A	12.5/15	12/14.5/17	10/11/13/15	10/12.5/14.5
Power factor Cos φ	>0.95	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4	4
Ø Coil mm	190	190	190	190

Modell BH/IN	208 V/1 Ph	230 V/1 Ph	240 V/1 Ph
Wattage kW	2.5	2.5	2.5
Current A	12	11	10
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190

Modell SH/BA	208 V/1 Ph	230 V/1 Ph	240 V/1 Ph
Wattage kW	3.5	3.5	3.5
Current A	max. 16	15	14.5
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190
Modell SH/BA	208 V/3 Ph	400 V/3 Ph	440 V/3 Ph
Wattage kW	5	5	5
Current A	13.9	7.2	6.6
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190

Modell SH/IN	208 V/1 Ph	230 V/1 Ph	240 V/1 Ph
Wattage kW	3.5	3.5	3.5
Current A	max. 16	15	14.5
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190
Modell SH/IN	208 V/3 Ph	400 V/3 Ph	440 V/3 Ph
Wattage kW	5	5	5
Current A	13.9	7.2	6.6
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190

Modell SH/WO	208 V/1 Ph	230 V/1 Ph	240 V/1 Ph
Wattage kW	3.5	3.5	3.5
Current A	max. 16	15	14.5
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190
Modell SH/WO	208 V/3 Ph	400 V/3 Ph	440 V/3 Ph
Wattage kW	5	5/8	5
Current A	13.9	7.2/11.6	6.6
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190

Modell SH/WO/IN	208 V/1 Ph	230 V/1 Ph	240 V/1 Ph
Wattage kW	3.5	3.5	3.5
Current A	max. 16	15	14.5
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190
Modell SH/WO/IN	208 V/3 Ph	400 V/3 Ph	440 V/3 Ph
Wattage kW	5	5/8	5
Current A	13.9	7.2/11.6	6.6
Power factor Cos φ	>0.95	>0.95	>0.95
Discharge rate mA	4	4	4
Ø Coil mm	190	190	190

Max. tolerance of power supply	Nominal voltage +6/-10 %
Frequency	50/60 Hz
Protection class	IP X0
Min. diameter of pans	Approx. 12 cm/approx. 4.7"
Max. ambient temperature: stockage	-20 to 70°C/-4 to +158°F
Max. ambient temperature: function	+5 to 40°C/41 to 104 °F
Max. relative humidity of air: stockage	10 to 90 %
Max. relative humidity of air: function	30 to 90 %

3 Functioning

3.1 Adjusting the performance rate

The performance rate is adjusted by the potentiometer (control knob). The inductive performance depends on the position of the potentiometer:

- Position 1 = minimum power
- Position 9 (resp. Position 12) = maximum power.

3.2 Check of the temperature

Induction coil

The temperature of the induction coil is checked by a temperature sensor. If the coil is heated over the maximum temperature, the heating process is stopped. As soon as the coil has cooled down, the Induction unit can be re-started. Turn the position of the kontrol knob on "0" and then on the required power level (see chapter 7.2 Error Messages).

Power board

The temperature of the heat sink is checked by a temperature sensor. As soon as the heat sink is heated over 60°C/140°F, a cooling fan is started. A temperature of the heat sink of more than 75°C/167°F will reduce automatically the power in order to keep the induction cooker working under normal conditions. The internal temperature of the unit is supervised as well. The power will be reduced when the temperature reaches 70°C/158°F. As soon as the temperature reaches 80°C/176°F the unit will stop working and show the error code E06 (see chapter 7.2).

3.3 Overload current protection

When inappropriate pan material or magnetic objects are detected on the heating area, the current in the induction coil may rise substantially. In order to protect the power board, the coil current is checked. As soon as the current in the coil exceeds the tolerance, the generator will cut out and there is no further active energy exchange. The unit can be re-started as soon as normal working conditions are reached.

4 Tests

4.1 Pan material for induction cookers

When cooking with induction it is most important to use appropriate pan material. The bottom of the pan is the element that closes the magnetic field generated by the induction coil. We recommend to use only appropriate pan material.

In order to check your pan, make a test. You will need 1lt water of about 20°C/68°F. Heat up the pan with maximum power and measure the time it takes until the water is boiling. Refer and compare to the reference time given by INDUCS Ltd. (2,5kW approx. 240 sec., 3,5kW approx. 140 sec., 5kW approx. 80 sec., 8kW approx. 60 sec.). This heating-up time gives you information about the efficiency of the pan. Bad pans have considerably longer heating-up times for the same quantity of water.

In order to find out whether the pan material is appropriate for induction, use a magnet. This has to stick to the bottom of the pan. This test says nothing about the efficiency or the material structure of the pan (it can be a bad induction pan).

4.2 Pan detection

The heating area is warmed up by the hot pan.

ATTENTION To avoid injuries (burnings) do not touch the heating area.

This test shows whether the induction cooker is working well when pans with a small diameter are used and if small metallic objects are heated-up on the heating area.

To do this test, you need the following material:

An appropriate pan with a bottom diameter of 12cm/4.7" or two untreated round iron plates, approximately 4mm/0.16" thick:

• iron plate 1: diameter d = 12 cm/4.7"

• iron plate 2: diameter d = 7 cm/2.75"

4.3 Test with pans

Step	Action	Level	Result
1	Put the pan in the middle of the heating	19 (12)	Heat, the indicator lights
	area		
2	Push the pan until the edge of the pan is	19 (12)	No heating, the indicator
	in the middle of the heating area		does not light

4.4 Test with metallic plates

Step	Action	Level	Result
1	Put the metallic plate 1 in the middle of	19 (12)	Heat, the indicator lights
	the heating area		
2	Put the metallic plate 2 in the middle of	19 (12)	No heating, the indicator
	the heating area		does not light

4.5 Power rating

	The heating area is warmed up by the hot pan.
ATTENTION	To avoid injuries (burnings) do not touch the
	heating area.

Step	Action	Level	Result
1	Put the pan on the heating area until the	9 (12)	Heat, water is boiling
	water boils		
2	Reduce the power by turning the control	(12) 91	Heat rating reduces (water
	knob down slowly		does not boil anymore),
			phase current reduces

4.6 Maximum rating

	The heating area is warmed up by the hot pan.
ATTENTION	To avoid injuries (burnings) do not touch the
	heating area.

4.7 Fan

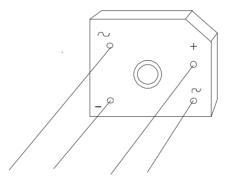
With this test, fan, fan controller as well as the degree of soiling are verified. At the beginning of the test, the induction cooker should be cold. You need a pan with a bottom diameter of >28 cm/11".

Step	Action	Level	Result
1	Put a pan on the heating area and fill a	9 (12)	Heat
	few litres of water in it		
2	Measure the time until the fan starts	9 (12)	The fan should start working
	working		in 6-8 minutes
3	Go on cooking for about 30 minutes	9 (12)	
4	Turn off the induction cooker	0	The fan keeps working.

4.8 Test of the components

CAUTION The mains cable must be switched off.

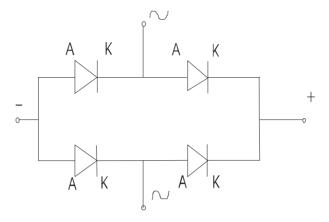
4.8.1 Rectifier



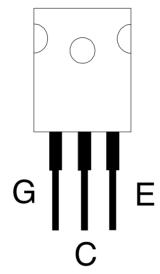
The rectifier is fixed at the power board with four wires. These rectifier connections have to be unsoldered for correct test results At first, you have to measure the forward voltage between anode – cathode by means of the multimeter (please use only multimeters with diode check as an additional function).

The forward voltage for this diode is about $\underline{0.5V}$ in the direction $\underline{A} - \underline{C}$, in the opposite direction there is no current flow.

In case one of the four diodes shows a short circuit or an interruption, the rectifier is defective and has to be exchanged.



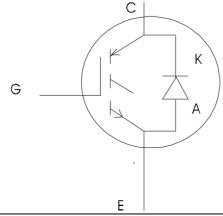
4.8.2 Transistor module (IGBT)



The IGBT (Insulated Gate Bipolar Transistor) is fixed on the circuit board with three solder connections.

The IGBT Transistor has as a supplementary protection an integrated recovery diode. At first, we have to measure the on-state voltage of this diode. The forward voltage of this diode should be about 0.5V.

In case the recovery diode shows a short circuit or an interruption, the IGBT transistor is defective and has to be exchanged.



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5 Maintenance/Service

Maintenance work may only be done by authorized personnel. Before starting the maintenance work, the power supply must be turned off and the appliance must have cooled down. The following maintenance works need to be carried out periodically. The longer and more frequently the cooker is used, the more often the maintenance works have to be done. Every cooker should be checked at least once a year.

Fan

The proper function of the cooker can only be guaranteed if the electronic unit is kept at normal working temperature.

- The air inlet and outlet slots must not be blocked or covered.
- The air filter must not be blocked by dirt or grease.
- The airducts must be free of dirt.
- The air must circulate freely through the heat sink.
- The fan is properly mounted.
- The heat sinks are properly mounted.

Check Induction coil

- Mechanical fixing (screws tightened)?
- Coil adhesive (mounting o.k.)?
- Ferrite (mounting o.k.)?
- Copper coil (mounting o.k.)?

General check

- Earth protection
- Screwed connections
- Cable insulation
- Any kind of dirt or liquids that have entered the cooker must be cleaned out
- Remove insects (if present)

6 Fault finding

6.1 Generally

Caution	Do not open the cooker while the power is
	connected. Dangerous tension!

The induction cooker may only be serviced by authorized personnel.

Stop any work if the heating area (Ceran Glass) is broken. The induction cooker must be switched off and the mains cable disconnected. Do not touch any parts inside the cooker.

Before replacing a part, check the wiring. Give special attention to the following faults:

- Broken cables
- Squeezed cables
- Defective insolations of cables
- Bad soldering joints

You must not do any repair on the circuit boards. The appropriate maintenance work should be carried out after each repair (see "Maintenance", and "Service").

6.2 Error messages

Number of	Significance	Measures to take
flashing signals		
Error code		
3	Temperature heat sink ³⁾	a. Heat sink temperature too high- wait
		until the temperature has cooled down under 80°C/176°F
		b. Check supply of cooling air – perhaps
		blocked – check function of fan
		c. Check temperature of heat sink –
		replace power circuit
4	Temperature cooking	a. Temperature of the cooking surface too
	surface 3)	high
		b. Check CU measure coil – index value
		at 20°C/68°F – approx. 50hm

Number of flashing signals Error code	Signification	Mo	easure to take
5	Error on power switch 3)	a.	Check connection
	The state of the s		Check power switch
6	Temperature inside the unit		Check whether the unit is next to a
	too high ³⁾		source of heat as e. g. friteuse
		d.	Check whether hot air is taken in –
			generator has no air exhaust system
7	Empty cooking sensor 1)	a.	Check cooking material in the pan
8	Sensor error 3)	a.	Check Cu sensor
		b.	Check heat sink sensor
		c.	Check RTCS-sensor
		d.	Check board sensor
12	Power reduction, heat sink	a.	Turn the power down
	temperature ²⁾	b.	Check fan
13	Power reduction,	a.	Take pan off until cooking area has
	temperature of cooking		cooled down
	surface 2)	b.	Wait until it has cooled down
	CU sensor 1	c.	Check coil
	Warning temperature		
17	CU sensor 1	a.	Temperature of the cooking field too
	overtemperature ³⁾		high
		b.	Check CU sensor 1, index value 50hm at 25°C
18	CU sensor 2	a.	Temperature of the cooking field too
	overtemperature ³⁾		high
		b.	Check CU sensor 2, index value 50hm
			at 25°C.
19	CU sensor 2	a.	1 &
	warntemperature		high
		b.	Turn the power down
20	Power reduction generator	a.	Check for heat sources around the
	inside temperature ²⁾		generator and remove them
	3)	b.	Check air circulation
21	Heat sink sensor error 3)	a.	Contact Inducs AG
24	Board temperatur sensor error ³⁾	a.	Exchange power unit
25	CU sensor 1 error 3)	a.	Check CU sensor 1 for short circuit or
			discontinuation, index value 50hm at
			25°C.
26	CU Sensor 2 error 3)	a.	Check CU sensor 2 for short circuit or
			discontinuation, index value 50hm at 25°C.
27	Empty cooking detector CU	a.	Check cooking material in the pan
	sensor 1 1)		S r
28	Empty cooking detector CU	a.	Check cooking material in the pan
	sensor 2 1)		

Order of error message for error code 1-8:

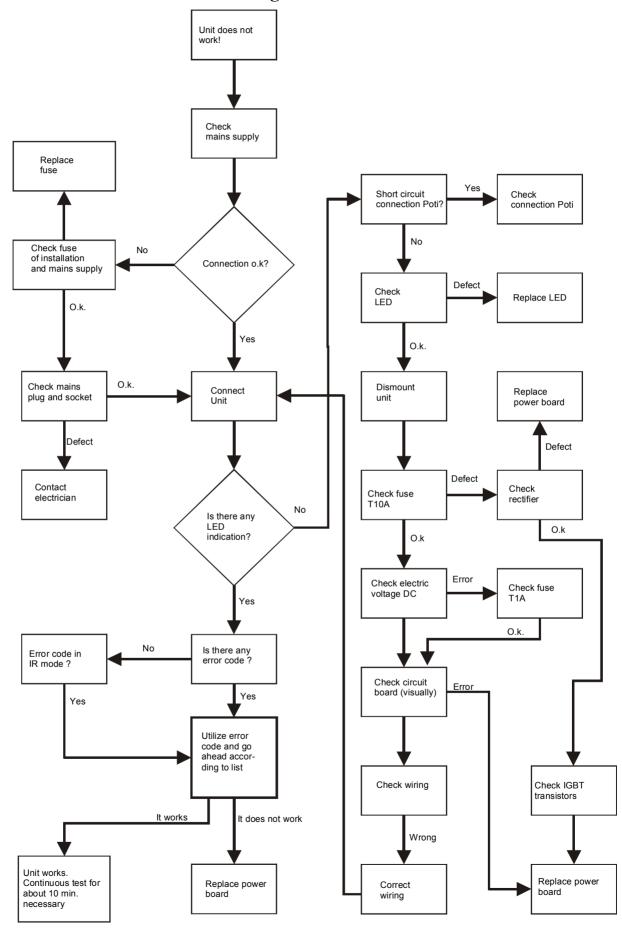
The indicator lamp flashes for an interval of 0,6 sec. The following short flashes need to be counted. This gives information about the error corresponding to the above mentioned code system.

 $^{^{1)}}$ The induction unit can only be restarted when the fault has been rectified (turn power rotary knob ,,off")

²⁾ The induction unit continues working.

³⁾ The induction unit does not heat...

6.3 Flow chart to fault finding



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7 Exchange of spare parts

Caution	All spare parts and accessories may only be changed by authorized personnel.	
Caution	In order to guarantee safety use only genuine spare parts and accessories from INDUCS Ltd If other components are used no liability is accepted.	

Caution The mains cable must be disconnected.

7.1 To open the induction unit (base)

- Turn the induction unit over (upside down)
- Remove M4x8 screws
- Turn induction unit back to normal position
- Lift cover, tip to the <u>right</u> side, stand it on its side
- Remove coil carrier: remove the 2 stop nuts on the left
- Remove M4 screws
- Remove screws A1 and A2
- Turn away coil carrier at the left

7.2 To open the induction unit (install)

- Remove M4 screws on the right side
- Lift cover with the glass
- Remove M4 screws, remove coil carrier
- Remove PT-sensor and coil connections

7.3 Repair of spare parts

Repair of spare parts and of whole units may only be effected by INDUCS Ltd. Therefore check and replace only parts described in this service manual.

In case you should repair parts, please describe exactly the faults and give information about the history of the unit, for example new installation, changements done next to the induction cooker or to other units supplied by the same network.

In order to save transport charges, do not return defective parts such as temperature sensors, rectifier, transistor modules, interrupters. Such parts can be disposed correctly on place.

8 Adjustment of process parameters

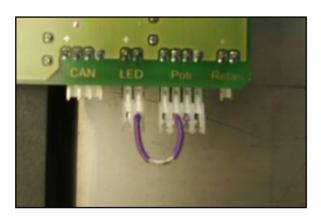
The induction unit (excluding WOK-units) with new Cu sensors can be adjusted. This can be done either by means of the short circuit plug Poti-LED art. nr. 94900096 or by PC/Laptop. In addition, the pan detection and the performance can be adjusted by the hyperterminal program of the PC/Laptop. Exact information to the use of the hyperterminal program is given in chapter 9 "IR interface".

8.1 How to initialize CU sensors by the short circuit plug

If only the CU sensor is exchanged, the new CU sensor can be initialized by means of the short circuit plug Poti-LED. For this, you will not need the PC/Laptop. The pan detection and the performance will not have to be changed.

Prozedure of initialization:

- The cooking area has to be devoid of any items
- Surrounding temperature 25°C (+/-3°C)
- Disconnect the induction unit from the mains supply
- Put short circuit plug Poti-LED into the power print



- Connect the induction unit to the mains supply
- The CU sensors will now be initialized automatically
- After successful initialization, the green LED on the CPU-print will illuminate.
- In case the system will find an error during initialization, the red LED will illuminate
- Disconnect the induction unit from the mains supply
- Check the CU sensors at the plug by means of the Ohmmeter
- Re-start the procedure of initialization
- Disconnect the unit from the mains supply
- Remove the short circuit plug Poti-LED

8.2 Initialisation of the induction unit by PC/Laptop

The initialization of the CU sensors as well as the adjustments of pan detection and performance can be done by means of the hyperterminal program. You will find exact information for the handling of the hyperterminal program in chapter 9 "IR interface".

IMPORTANT! Pay special attention whether you receive feedback signal from the PC/Laptop after every changement. This will be the sign that the changement has been accepted.

12345	Entry to the mode of adjustment (password)
;	Initialize Cu sensor (temperature of the coil ca. 25°C) (excluding WOK)
N	Increase the mains current limit (+)
n	Decrease the mains current limit(-)
"	Save the limit of the mains current
T	Increment pan detection (+)
t	Decrement pan detection (-)
=	Save pan detection
-?	Leave the mode of adjustment
•	State software version

8.3 Change of the parameters

- 1. Connect the RS232 connection cable to the PC/Laptop and straighten the IR-box to the left lower corner of the ceran glass.
- 2. Start HT2400 (see chapter 9) and turn unit on!
- 3. By input of "12345" the mode of adjustment is started. The following message appears on the hyperterminal program:

IR= On WELCOME REPAIRMEN

4. Not valid for WOK. The parameters on the CPU can now be changed! The unit temperature and the surrounding temperature have to be 25°C (+/-4°C). Press the key ";". On the console appears the message "please confirm". Press the key ";" again. The CU sensor will now be initialized to 25°C. The following message appears on the hyperterminal program:

save CU sensor : 25°C

5.	Set the limit of the mains current (see mains current parameters in chapter 8.2):
	N increase the limit of the mains current (+)
	N decrease the limit of the mains current (-)
	The following message appears on the hyperterminal program:
	linecurrent limit=
6	Save the limit of the mains current with the key ""! On the console appears the message
0.	"please confirm". Press the key """ again. The following message appears on the monitor:
	save linecurrent limit:
7.	Set the pan detector (see pan detector parameters in chapter 8.2):
	T increase pan detector (+)
	T decrease pan detector (-)
	The following message appears on the monitor:
	pan detection limit=
8.	Save the pan detector with the key "=".On the console appears the message "please confirm". Press the key "=" again. The following message appears on the monitor:
	save pan detection limit:
9.	By input "-?" the mode of adjustment will be left. The following message appears on the monitor:
	see you again!
10	The mode of adjustment has a time-out function. After 10 minutes the mode of adjustment will be left automatically.
Th	e adjustments are now finished and it is not possible to make any other adjustments.

Otherwise you have to start at the beginning!

Different information about the unit is shown in the adjusting mode. The following parameters can be read:

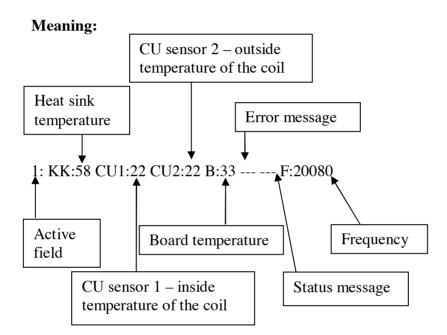
Output on the hyperterminal program:

```
1: KK:58 CU1:22 CU2:22 B:33 --- F:20080

1: KK:58 CU1:22 CU2:24 B:33 --- F:20080

1: KK:57 CU1:22 CU2:24 B:33 --- F:20080

1: KK:57 CU1:22 CU2:24 B:33 --- F:20080
```



The fan will be activated at a heat sink temperature of 60°C.

8.4 Parameters for mains current and pan detector

Article Nr.	Unit	Mains current	Pan detector
	BH/BA 1500, 120VAC, 1N, 1,5kW	160	29
99560102	BH/BA 1800, 120VAC, 1N, 1,8kW	187	21
99560103	BH/BA 2500, 208VAC, 1N, 2,5kW	153	23
99560104	BH/BA 2500, 230VAC, 1N, 2,5kW	140	27
99560105	BH/BA 2500, 240VAC, 1N, 2,5kW		
99560106	BH/BA 3000, 208VAC, 1N, 3kW	180	26
99560107	BH/BA 3000, 230VAC, 1N, 3kW	163	28
99560108	BH/BA 3000, 240VAC, 1N, 3kW		
99560109	BH/BA 3500, 208VAC, 1N, 3,5kW	192	26
99560110	BH/BA 3500, 230VAC, 1N, 3,5kW	187	28
99560111	BH/BA 3500, 240VAC, 1N, 3,5kW		
99560112	BH/BA 2300, 230VAC, 1N, 2,3kW	130	27
980000	BH/IN1500, 120VAC, 1N, 1.5kW	162	33
	BH/IN1800, 120VAC, 1N, 1.8kW	187	33
99580001	BH/IN 2500, 208VAC, 1N, 2,5kW	153	33
99580002	BH/IN 2500, 230VAC, 1N, 2,5kW	140	36
99580003	BH/IN 2500, 240VAC, 1N, 2,5kW		
99560004	SH/BA 3500, 208VAC, 1N, 3,5kW	192	36
99560005	SH/BA 3500, 230VAC, 1N, 3,5kW	192	35
99560006	SH/BA 3500, 240VAC, 1N, 3,5kW	185	34
99560007	SH/BA 5000, 208VAC, 3N, 5kW	167	21
99560008	SH/BA 5000, 400VAC, 3N, 5kW	90	12
99560009	SH/BA 5000, 440VAC, 3N, 5kW		
99580004	SH/IN 3500, 208VAC, 1N, 3,5kW	192	36
99580005	SH/IN 3500, 230VAC, 1N, 3,5kW	192	35
99580006	SH/IN 3500, 240VAC, 1N, 3,5kW	185	34
99580007	SH/IN 5000, 208VAC, 3N, 5kW	167	21
99580008	SH/IN 5000, 400VAC, 3N, 5kW	90	12
99580009	SH/IN 5000, 440VAC, 3N, 5kW	70	12
	222.2000,		

Article Nr.	Unit	Mains current	Pan detector
99570001	SH/WO 3500, 208VAC, 1N, 3,5kW	192	29
99570002	SH/WO 3500, 230VAC, 1N, 3,5kW	192	31
99570003	SH/WO 3500, 240VAC, 1N, 3,5kW	185	41
99570004	SH/WO 5000, 208VAC, 3N, 5kW	167	23
99570005	SH/WO 5000, 400VAC, 3N, 5kW	90	11
99570006	SH/WO 5000, 440VAC, 3N, 5kW	78	10
99570008	SH/WO 8000, 400VAC, 3N, 8kW	141	15
99580016	SH/WO/IN 3500, 208VAC, 1N, 3,5kW	192	29
99580017	SH/WO/IN 3500, 230VAC, 1N, 3,5kW	192	31
99580018	SH/WO/IN 3500, 240VAC, 1N, 3,5kW	185	41
99580019	SH/WO/IN 5000, 208VAC, 3N, 5kW	167	23
99580020	SH/WO/IN 5000, 400VAC, 3N, 5kW	90	11
99580021	SH/WO/IN 5000, 440VAC, 3N, 5kW	78	10
99580025	SH/WO/IN 8000, 400VAC, 3N, 8kW	141	15

9 IR Interface

9.1 Build-up of IR communication

To build-up the IR communication, you need the software Hyper Terminal which is usually already available in Windows under **Start =>Program=>Accessories => Hyperterminal**. Prior to the first use, Hyperterminal should be configurated properly. INDUCS service needs the following settings:

Connect the IR box and bring it into line to the IR sensor on the generator.

Start Hyperterminal and give an access name, e. g. IR2400.ht



Select the communication via COM1 (or where your IR box has been connected).



Select the following settings: 2400 Bits/sec., 8 Databits, no parity, 1 Stop bit, Hardware protocol



These adjustments will be saved under the access name IR2400.ht.