# INDUO



# **Operating Manual**





| 1. PREFACE                           | 03 |
|--------------------------------------|----|
| Explanations to symbols              | 03 |
| Spare part overview exploded diagram | 04 |
| Spare part overview article numbers  | 06 |
| Dimensions                           | 07 |
| Amount of fuel                       | 07 |
| Electrical connection                | 07 |
| Technical data                       | 07 |
| Packaging                            | 07 |
| 8 8                                  |    |

# 2. IMPORTANT INFORMATION

| 2. IMPORTANT INFORMATION               | 08 |
|--|----|
| General warning and safety information |    |
| Safety distances                       |    |
| Prior to set up                        | 09 |

# 3. BRIEF INFORMATION ON FUEL - PELLETS

| What are pellets?                                  |  |
|--|--|
| Wood pellet specification according to ENplus – A1 |  |
| Pellet storage                                     |  |

10

11

*12* 

*13* 

*16* 

# 4. BRIEF INFORMATION ON FUEL - LOGS

| Suitable fuels and fuel amounts1       | 1 |
|--|---|
| Wood types1                            | 1 |
| Fuel amounts with nominal heat output1 | 1 |
| Clean combustion                       | 1 |

# 5. TECHNOLOGY AND SAFETY FUNCTIONS

# 6. INSTALLING THE STOVE

| General information                |  |
|------------------------------------|--|
| Connection to the chimney          |  |
| Connecting to a steel chimney      |  |
| Combustion air                     |  |
| Feeding in external combustion air |  |
| 8                                  |  |

| 7. ASSEMBLY/DISMANTLING STONE AND OPTIONS | 14 |
|---|----|
| Dismantling stone                         | 14 |
| Conversion to flue pipe connection rear   |    |

# 8. INTERNAL CONTROLS – TOUCH-DISPLAY

| Basics   | 16 |
|--|----|
| Operation  | 16 |
| Input posibilities                                       | 16 |
| Displays   | 16 |
| Input posibilities<br>Displays<br>Putting into operation | 17 |
| First steps  | 17 |
| Activating the burnback and flue gas flap                |    |
| HOME - main menu   |    |
| Main menu levels   |    |
| MODE - mode selection                                    | 19 |
| SETUP – settings   | 19 |
| Heating time programme                                   |    |
| INFO - main menu   | 20 |
|  |    |

| INFO – inputs          | .20 |
|------------------------|-----|
| INFO – outputs         |     |
| INFO – parameters      |     |
| Screen saver           | .21 |
| Additional information |     |

# 9. COMFORT OPTIONS

| 9. COMFORT OPTIONS                      | 22 |
|---|----|
| RIKA room sensor/RIKA radio room sensor |    |
| RIKA GSM Control                        | 22 |
| RIKA interface for various options      |    |
| External room thermostat                |    |
| External connection cable bridge        | 22 |
|   |    |

# 10. MODES

| 10. MODES                                 | 23 |
|---|----|
| Pellet operation manual/automatic/comfort | 23 |
| Fuel addition pellet operation            |    |
| Log operation                             | 22 |
| Manual regulation                         |    |
| Combined operation                        |    |

# 11. FLOW DIAGRAM PELLET - LOG OPERATION

| 12. WARNING AND ERROR MESSAGES | 27 |
|--------------------------------|----|
| Warnings                       | 27 |
| Errors                         |    |

# 13. CLEANING AND MAINTENANCE

| Basic information                     |
|---------------------------------------|
| Cleaning the fire trough              |
| Ampty the ash drawer                  |
| Cleaning the door glass               |
| Cleaning flue pipes                   |
| Cleaning the convection air openings  |
| Cleaning flue gas deflector section   |
| Cleaning the flame temperature sensor |
| Cleaning the pellet container         |
| Checking door seal                    |
| Checking chimneay connection          |

| 14. PROBLEMS - POSSIBLE SOLUTIONS | 32 |
|-----------------------------------|----|
| Problem 1                         | 32 |
| Problem 2                         | 32 |
| Problem 3                         | 32 |
|                                   |    |

# 15. INSTRUCTIONS FOR COMMISSIONING PROTOCOL

16. GUARANTEE

# 1. PREFACE

# Explanations to symbols





...hex #10 (M6 winding)



...allen key #6 (M8 winding)

..manually



...scrawl with copper paste

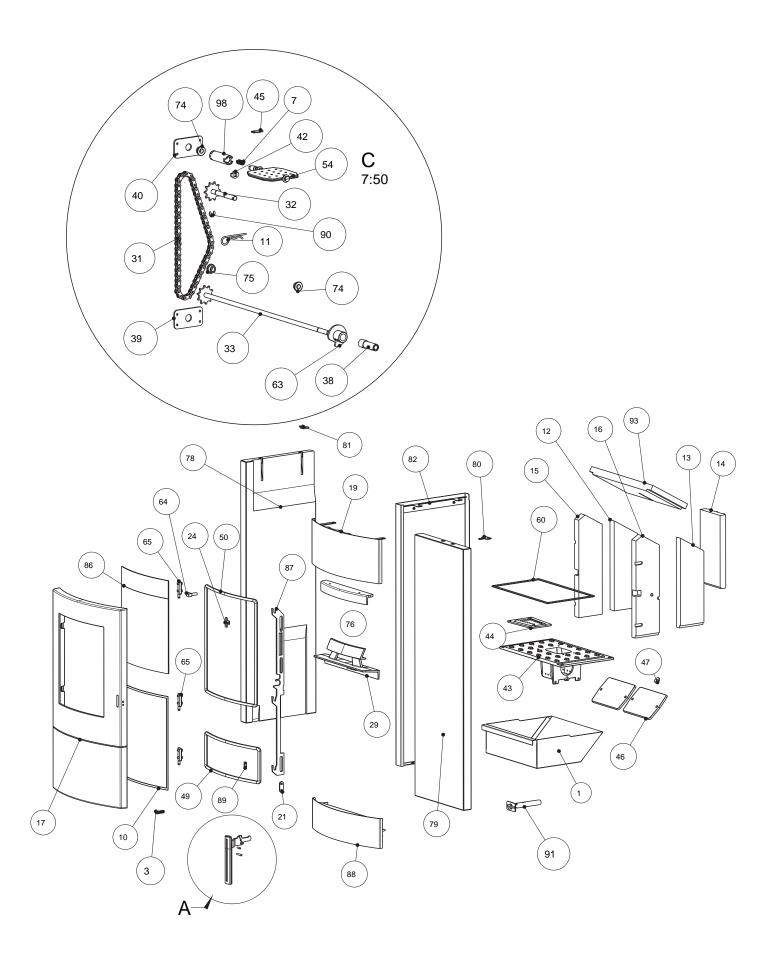


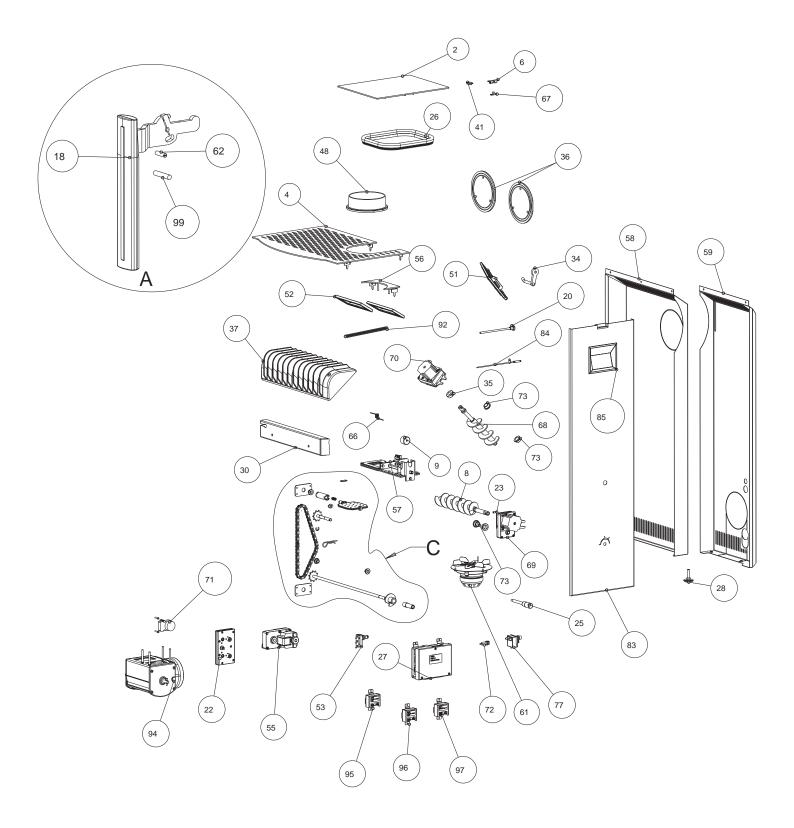
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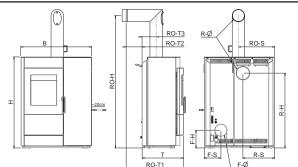
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| Nr.      | Art.Nr.:          | Description                                   | Nr.           | Art.Nr.:           | Description  |
|----------|-------------------|---|---------------|--------------------|--|
| 1        | L01961            | ash drawer                                    | 56            | B16577             | flue pipe cover metallic grey                        |
| 2        | Z34488            | container lid                                 | 00            | B16966             | flue pipe cover metallic black                       |
| 3        | N111901           | pressure spring door contact                  | 57            | B16683             | burnback flap assembled                              |
| 4        | B16576            | lid   | 58            | Z34486             | rear wall left                                       |
| 6        | N110461           | double ball catch                             | 59            | Z34487             | rear wall right                                      |
| 7        | N108131           | pressure spring rotating grid                 | 60            | N111631            | round sealing cord grey Ø6mm                         |
| 8        | Z34464            | push in screw                                 | 61            | N111581            | induced draught fan motor                            |
|          | L02250            | bearing holding plate                         | 62            | N111637            | setscrew door handle                                 |
| 9        | Z34790            | electromagnet                                 | 63            | B16559             | setscrew dump grate contact                          |
| 10       | N103693           | culimeta flat packing black 8x2               | 64            | Z34457             | hinge  |
| 11       | N111538           | spring plug                                   | 65            | Z34472             | hinge plate  |
| 12       | Z34411            | combustion chamber liner rear left            | 66            | Z34529             | torsion spring                                       |
| 13       | Z34410            | combustion chamber liner rear right           | 67            | N110461            | double ball catch                                    |
| 14       | Z34409            | combustion chamber liner rear                 | 68            | Z34463             | discharge screw                                      |
| 15       | Z34412            | combustion chamber liner front left           | 69            | N111862            | Screw motor, stepless                                |
| 16<br>17 | Z34413<br>Z34478  | combustion chamber liner front right          | 70<br>71      | N111862<br>N111817 | Screw motor, stepless                                |
| 17       | B16564            | combustion chamber door complete              | 72            | N111817<br>N107887 | air regulator motor<br>fuse holder                   |
| 18       | B16565            | door handle complete                          | 74            | N107887            | sinter bearing ID10                                  |
| 19       | B16568            | front top                                     | 75            | Z34555             | sinter bearing ID 10,2 sprocket out                  |
| 20       | B15248            | sensor tube                                   | 76            | Z34553             | disc air deflector                                   |
| 21       | L02007            | guide stone                                   | 77            | N111586            | safety temperature limiter                           |
| 22       | B16464            | transmission air regulator                    | 78            | Z34565             | stone option side                                    |
| 23       | N111058           | setscrew with ISK and pin                     | 79            | Z34483             | soapstone front                                      |
| 24       | L00475            | glass holder                                  |               | Z35078             | sandstone front                                      |
| 25       | B16798            | handle burnback flap                          | 80            | L01966             | stone holder stone front                             |
| 26       | N111731           | container seal                                | 81            | L02009             | stone holder stone side                              |
| 27       | B16561            | mainboard USB11                               | 82            | B16566             | side panels steel left                               |
| 28       | N111695           | height adjustment screw                       | 83            | B16572             | side panels steel right                              |
| 29       | Z34554            | wood retainer                                 | 84            | B16676             | flame temperatur probe Induo                         |
| 30       | Z34479            | cable cover                                   | 85            | B16574             | touch-Display  |
| 31       | Z34557            | chain dump grate                              | 86            | Z34303             | door glas (ceramic glass)                            |
|          | Z35158            | spacer chain guide / clamping plate           | 87            | L02010             | door lock  |
|          | Z35302            | chain guide                                   | 88            | B16570             | bottom cover panel                                   |
| 20       | Z35303            | clamping plate                                | 89            | L01957             | closure plate  |
| 32       | B16553<br>Z34824  | sprocket top                                  | 90            | N104718            | shaft securing device                                |
| 33       | B16555            | bearing clamping plate<br>sprocket bottom     | 91<br>92      | B16797<br>Z34471   | ceramic ignition<br>tension spring flue gas flap     |
| 34       | B16675            | flap lever flue gas flap                      | 92            | Z34471<br>Z34480   | deflector  |
| 35       | Z11915            | lock ring conveyer screw                      | 94            | B16547             | air regualtor  |
| 36       | Z21690            | cooking cover                                 | 95            | B16030             | additional board                                     |
| 37a      | B16679            | convection cover                              | 96            | B16671             | additional board Induo                               |
| 37b      | Z35555            | Angle bracket                                 | 97            | B16672             | additional board flap B                              |
| 38       | Z34467            | coupling dump grate motor                     | 98            | Z33924             | intermediate shaft dump grate                        |
| 39       | Z34461            | bearing plate bottom                          | 99            | N111798            | cylindrical pin door handle                          |
| 40       | Z34757            | bearing plate top                             |               | Z35018             | Cable touch display                                  |
|          | B16708            | bearing & sprocket complete                   |               | B16581             | Cabletree  |
| 41       | N111732           | magnetic switch upper section                 |               | Z35163             | sealing burner                                       |
| 42       | L01875            | driving plate dump grate                      |               | B17365             | Upgrade kit bearing feeder screw                     |
| 43       | Z34242            | fire trough                                   | 8             | Z34464             | push in screw  |
| 44       | L02008            | fire trough tray                              | 73            | Z35182             | Plastic bearing                                      |
| 45       | L02044            | holder dump grate                             | 100*          | N110032            | Hexagonal screw                                      |
| 46       | B16680            | cleaning cover                                | 101*          | N103964            | Hexagonal screw M06x16                               |
| 47       | N111883           | milled nut (cleaning cover)                   | 102*          | N100172            | washer   |
| 48       | Z30137            | flue pipe attachments (without seal) metallic | 103*          | L02250             | bearing holding plate                                |
| 49       | N111320           | sealing cord grey Ø14mm                       | 104*          | L02605             | bearing collar plate                                 |
| 50       | N111320           | sealing cord grey Ø14mm                       | 105           | L02604             | motor plate  |
| 51       | B16681            | flue gas flap<br>flue gas shute lid           | 106*<br>107** | Z35750             | bearing support                                      |
| 52<br>53 | B16682<br>N111825 | flue gas chute lid<br>door contact switch     | 107**         | N111967<br>Z35752  | allen screw M06x10                                   |
| 53<br>54 | Z34244            | dump grate                                    | 100           | *                  | bearing retaining ring<br>from serial number 1297483 |
| 55       | N111880           | dump grate motor                              |               | * *                | not included in upgrade kit B17365                   |
| 00       | 11111000          | wanth Prace more                              |               |                    | not induce in upplace fit D17000                     |



| Dimensions   |      |      |
|--|------|------|
| height   | [mm] | 1132 |
| width  | [mm] | 882  |
| corpus depth   | [mm] | 515  |
| Weight   |      |      |
| weight without shell                                 | [kg] | 283  |
| weight with shell                                    | [kg] | 340  |
| weight with soap stone sideways (optional)           | [kg] | 380  |
| Flue pipe connection                                 |      |      |
| R - Ø flue pipe outlet                               | [mm] | 150  |
| RO - H original angle pipe connection height         | [cm] | 165  |
| RO - T1 original angle pipe total depth              | [cm] | 71   |
| RO - T2 original angle pipe distance to rear wall    | [cm] | 20   |
| RO - T3 deapth from rear wall to middle of flue pipe | [cm] | 18   |
| RO - S original angle pipe side distance             | [cm] | 45   |
| R - H rear connection height                         | [cm] | 93   |
| R - S rear connection side distance                  | [cm] | 40   |
| Fresh air connection                                 |      |      |
| F - Ø diameter                                       | [mm] | 125  |
| F - H connection height                              | [cm] | 22   |
| F - S side distance                                  | [cm] | 21   |
| Convection air connection                            |      |      |
| K - Ø diameter                                       | [mm] | -    |
| K - H connection height                              | [cm] | -    |
| K - S side distance                                  | [cm] | -    |

# Amount of fuel

|   | nominal load                        | part load                           |
|---|-------------------------------------|-------------------------------------|
| log operation   | 2 logs á ~1,4kg max.<br>25cm lenght | 2 logs á ~0,7kg max.<br>25cm lenght |
| pellet operation  | ~2,4kg                              | ~0,8kg                              |
| Burn time at full pellet ~ 14h<br>hopper                |                                     | ~ 43h                               |
| *Practical values may vary depending on pellet quality. |                                     |                                     |

Note

Pellet consumption depends on the size of the pellets. The larger the pellet, the slower the feed and vice versa.

# Electrical connection

The stove is supplied with an approx. 2m long connecting cable with a Euro-plug. This cable is to be connected to a 230Volt/50Hz socket. The average electrical power consumption is some 20 Watt in heating operation. And approx. 270 Watt during automatic ignition. The connection cable must be laid so that there is no contact to any sharp edges or hot surfaces of the stove.

# Technical data

| description                                      | measure                           | data      |
|--|-----------------------------------|-----------|
| heating capacity range                           | [kW]                              | 3 - 10    |
| room heating capacity depending on house coating | [m³]                              | 70 - 260  |
| fuel consumption                                 | [kg/h]                            | bis 2,4   |
| pellet container lid capacity                    | [kg]                              | 34        |
| electric supply                                  | [V]                               | 230V/50Hz |
| average electrical input                         | [W]                               | ~ 20      |
| fuse   | [A]                               | 2,5 T     |
| pellet operation                                 | measure                           | data      |
| heating capacity range                           | [kW]                              | 3 - 10    |
| efficiency in pellet mode                        | [%]                               | 91        |
| CO <sub>2</sub>                                  | [%]                               | 13,3      |
| CO-emission on 13% O                             | [mg/m <sub>N</sub> <sup>3</sup> ] | 30        |
| dust emission                                    | [mg/m <sub>N</sub> <sup>3</sup> ] | 10        |
| exhaust  | [g/s]                             | 5,4       |
| exhaust temperature                              | [°C]                              | 178,9     |
| chimney draft requirement                        | [Pa]                              | 0         |
| log operation                                    | measure                           | data      |
| heating capacity range                           | [kW]                              | 5 - 10    |
| efficiency in log mode                           | [%]                               | 86        |
| CO <sub>2</sub>                                  | [%]                               | 9,7       |
| CO-emission on 13% O                             | [mg/m <sub>N</sub> <sup>3</sup> ] | 792       |
| dust emission                                    | $[mg/m_N^3]$                      | 27        |
| exhaust  | [g/s]                             | 10,1      |
| exhaust temperature                              | [°C]                              | 180,2     |
| chimney draft requirement                        | [Pa]                              | 12        |

The owner of small firing systems or the person authorised for the small firing system is to keep the technical documentation and is to submit it to the authorities or the chimney sweep on request.

Note Please observe the national and European standards as well as local regulations concerning the installation and operation of firing installations!

# Packaging

Your first impression is important to us!

The packaging of your new stove provides excellent protection against damage. However damage to the stove and accessories may still occur during transport.

Note Therefore please check your stove on receipt for damage and completeness! Report any deficiencies to your dealer immediately! Pay particular attention during unpacking that the stone panels remain intact. Scratches to the material can easily occur. Stone panels are excluded from the warranty

The packaging of your new stove is environmentally neutral to a great extent

Tip

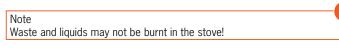
The wood used in the packaging has not been surface treated and may therefore be burnt in your stove. The cardboard and film (PE) can be disposed of via the municipal waste collection for recycling.

# 2. IMPORTANT INFORMATION

# General warning and safety information

Observance of the introductory general warning information is imperative.

- Read the entire manual thoroughly before installing and putting the stove into service. Observe the national provisions and laws as well as the regulations and rules applicable locally.
- RIKA stoves should only be installed in rooms with normal humidity (dry areas according to VDE 0100 Part 200). The furnaces are not splash water protected and may not be installed in wet areas.
- Only approved transport equipment with sufficient load carrying capacity may be used with your heating appliance.
- Your heating appliance is not suitable for use as a ladder or stationary scaffolding.
- The burning of fuel releases heat energy that lead to extensive heating of the stove surfaces, doors, door and operating handles, glass, flue pipes and possibly the front wall. Refrain from touching these parts without appropriate protective clothing or equipment e.g. heat-resistant gloves or means of operation (operating handle).
- Make your children aware of this particular danger and keep them away from the stove during heating.
- Only burn approved heating materials
- The combustion or introduction of highly flammable or explosive materials such as empty spray cans etc. in the combustion chamber and storing them near the stove is strictly prohibited due to the danger of explosion.
- No light or inflammable clothing is to be worn when post-heating.
- Use the heat-resistant gloves supplied to open the doors of your stove.
- Only use suitable tools from our range of accessories when handling embers and make sure that no embers fall out of the combustion chamber onto inflammable material.
- Push the embers together to form a firebed when you add new fuel (logs).
- Placing non-heat resistant objects on the stove or near it is prohibited.
- Do not place clothing on the stove to dry.
- Stands for drying clothes etc. must be placed at a sufficient distance to the stove ACUTE DANGER OF FIRE!
- When your stove is burning, the use of highly inflammable and explosive materials in the same or adjacent rooms is prohibited



# Safety distances

Note

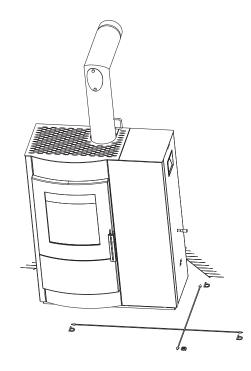
### 1. To non-combustible objects

a > 40 cm b > 10 cm

2. To combustible objects and reinforced concrete load-bearing walls a  $>80\mbox{ cm}$  b  $>20\mbox{ cm}$ 

### Tip

please observe a minimum distance of 20 cm behind and sideways the stove for maintenance.



### Floor bearing capacity

Ensure that the substructure is capable of bearing the weight of the stove prior to set-up.

### Note

No modifications may be made to the firing installation. This also leads to loss of warranty and guarantee.

### **Floor protection**

A base is required (glass, sheet steel or ceramic) if the floor is combustible (wood, carpet, etc.).

### Flue pipe connection

- Flue pipes pose a particular source of hazard regarding gas leaks and fire. Get the advice of an authorised specialist company for the layout and assembly.
- Please observe the corresponding installation guidelines for walls panelled with wood when connecting your flue pipes to the stove,
- Observe the formation of flue gas (atmospheric inversion) and draughts when the weather is unfavourable.
- Infeed of too little combustion air can lead to smoke in the rooms or to flue gas leaks. Hazardous deposits in the stove and chimney may also occur.
- If flue gas escapes, let the fire burn out and check whether all the air inlet openings are free and the flue gas pipes and the stove pipe are clean. If in doubt notify the master chimney sweep since draught malfunctions may be connected to your chimney.

### Stoves type 1 (BA 1):

- These may only be operated with the combustion chamber door closed.
- Suitable for multiple occupancy. (note the different country regulations)
- The combustion chamber door may only be opened to add fuel and must then be closed again otherwise other firing installations connected to the chimney may be endangered.
- The combustion chamber door is to be kept closed when the stove is not in operation.
- Fouling of the chimney i.e. deposits of highly inflammable materials such as soot and tar and subsequently fire in the chimney may occur if wet fuel is used and operation is damped too much.
- If this occurs Close the fresh air support (slider, regulator, flaps depending on model), phone the fire brigade and get yourself and other residents out of harm's way.

### Note

# on ROOM-AIR DEPENDENT and ROOM-AIR INDEPENDENT OPERATION:

Your stove has been tested as a room-air dependent stove according to EN 13240 and does not conform in Germany to the requirements for roomair independent operation. In combination with room-air installations (e.g. controlled ventilation and venting systems (extractors etc.) it must be ensured that the stove and the room air system are monitored and safeguarded mutually (e.g. via a differential pressure controller etc.). The combustion air infeed of approx. 20 m3/h must be ensured. Please observe the respective local regulations and rules in consultation with your master chimney sweep

# 3. BRIEF INFORMATION ON FUEL - PELLETS

# What are pellets?

Wood pellets are a standardised fuel. Every manufacturer must adhere to certain conditions in order to enable flawless, energy-efficient heating. Pellets are made from wooden waste, from sawmills and planning workshops, as well as from residue from forestry operations. These "starting products" are crushed, dried, and pressed into Pellet "Fuel" without any bonding agent.

### **ENplus – Pellets**

This new pellets are a standard sets new benchmarks in the European pellet market. The traceability of pellets is ensured thanks to the use of identification numbers. The pellet manufacturers' production facilities and manufacturing processes are reviewed every year. A quality assurance system ensures the pellets comply with the requirements of the new standard and that the conditions for trouble-free heating are guaranteed

# Wood pellet specification according to ENplus – A1

| parameter                 | measure             | ENplus-A1                 |
|---------------------------|---------------------|---------------------------|
| diameter                  | mm                  | 6 (±1) <sup>2)</sup>      |
| length                    | mm                  | 3,15 bis 40 <sup>3)</sup> |
| buld density              | kg/m³               | ≥600                      |
| calorific value           | MJ/kg               | ≥16,5                     |
| water content             | Ma%                 | ≤10                       |
| fine fraction (<3,15mm)   | Ma%                 | ≤ 1                       |
| mechanical rigidity       | Ma%                 | ≥97,54)                   |
| ash content               | Ma% <sup>1)</sup>   | ≤0,7                      |
| ash softening temperature | (DT) °C             | ≥1200                     |
| chlorine content          | Ma% 1)              | ≤0,02                     |
| sulphur content           | Ma% 1)              | ≤0,03                     |
| nitrogen content          | Ma% 1)              | ≤0,3                      |
| copper content            | mg/kg <sup>1)</sup> | ≤10                       |
| chrome content            | mg/kg <sup>1)</sup> | ≤10                       |
| arsenic content           | mg/kg <sup>1)</sup> | ≤1                        |
| cadmium content           | mg/kg <sup>1)</sup> | ≤0,5                      |
| mercury content           | mg/kg <sup>1)</sup> | ≤0,1                      |
| lead content              | mg/kg <sup>1)</sup> | ≤10                       |
| nickel content            | mg/kg <sup>1)</sup> | ≤10                       |
| zinc content              | mg/kg <sup>1)</sup> | ≤100                      |

1) in an anhydrous state

2) diameter must be specified

3) a maximum of 1% of the pellets may be longer than 40 mm,

max. length is 45 mm

4) the limit value of  $\geq$  97,7 Ma.-% applies when conducting measurements with a lignotester (internal control)

### Note

Please ask your pellet stove dealer for tested fuel and a list of monitored fuel manufacturers.

Using poor quality or prohibited pellet fuel will have a negative effect on the function of your pellet stove and can also lead to the warranty becoming null and void, as well as the product liability connected with this. Observe waste incineration legislation!

Only burn pellets that have been inspected according to ÖNORM, DIN Plus or ENplus-A1.

# Pellet storage

In order to guarantee problem free burning of the wooden pellets, it is imperative necessary to store the fuel as dry as possible and free from impurities.

Pellets should not be kept in sacks outdoors or stored in a manner where they are exposed to the environment. This can lead to blockages in the screw conveyor

### Note

"screw stoppers" are excluded from the warranty.

### Note

Your pellet stove is only approved for the burning of wood or pellets of tested quality. Burning straw, maize, woodchips etc. is not permitted! Nonobservance of these regulations makes void all warranty and guarantee claims and may impair the safety of the unit!

# 4. BRIEF INFORMATION ON FUEL - LOGS

# Suitable fuels and fuel amounts

Your stove is generally suitable for burning dry firewood. You can also burn fuels such as wood briquettes.

### Note

A stove is not a waste incinerator. The warranty lapses if waste or nonapproved materials such as plastic, treated wood etc. are burnt! This leads to damage to the stove and chimney and environmental pollution!



FUEL AMOUNTS

The stove is fitted with a construction-specific flat firebox. This means only one layer of fuel may be laid on the base embers.

Please observe that adding greater quantities of fuel leads to emission of more heat and greater heating of the stove than it is designed for. This may cause damage to your stove. This is reflected in particular on the glass of the combustion chamber door, which will get a gray haze in case of overheating the stove, which can not be removed.

# Wood types

Different types of wood have different fuel values. Deciduous wood is particularly suitable. It burns with a constant flame and forms long-lasting embers. Coniferous wood has higher levels of resin and burns off faster as do all softwoods and tends to spray sparks.

| wood type | fuel value<br>kWh/m³ | fuel value<br>kWh/kg |
|-----------|----------------------|----------------------|
| maple     | 1900                 | 4,1                  |
| birch     | 1900                 | 4,3                  |
| beech     | 2100                 | 4,2                  |
| oak       | 2100                 | 4,2                  |
| alder     | 1500                 | 4,1                  |
| ash       | 2100                 | 4,2                  |
| spruce    | 1700                 | 4,4                  |
| larch     | 1700                 | 4,4                  |
| poplar    | 1200                 | 4,1                  |
| robinia   | 2100                 | 4,1                  |
| fir       | 1400                 | 4,5                  |
| elm       | 1900                 | 4,1                  |
| willow    | 1400                 | 4,1                  |

# Fuel amounts with nominal heat output

Logs - wood briquettes (broken)

3 logs or pieces approx. 0.8kg each

The output of your stove is regulated via the Rikatronic<sup>3</sup>, however please observe that the output of your stove also depends on the chimney draught and the amount of fuel added.

# Clean combustion

1. The firewood must be dry and untreated.

Guideline between 14% and 18% relative wood moisture.

Wood stored dry and ventilated for 2 – 3 years.

- 2. Correct firewood amount and size
- Too much firewood leads to overheating. This stresses the material too much and leads to poor flue gas values.
- Too little firewood or logs being too large means the stove does not reach optimum operating temperature. The flue gas values are also poor in this case.
- For right quantity of firewood (see AMOUNT OF FUEL)

# 5. TECHNOLOGY AND SAFETY FUNCTIONS

The technological advances in your new combi stove are the result of years of testing and practical experience. The practical advantages of your pellet/log stove are convincing:

- Automatically regulated pellet operation
- Automatically regulated log operation
- Currentless log operation (manual regulation)

The range of operating modes leaves nothing to be desired. The automatic fuel detection means the operating mode can be changed at any time (simply add logs during pellet operation or ignite logs with the pellet burner).

Manually regulated currentless log operation is also possible. This ensures faultless operation even in the case of longer power cuts.

# Operating comfort

The microprocessor-controlled combustion regulation optimises the interaction of flue gas blower, air flap position and screw using the current combustion chamber temperature. This guarantees optimum combustion and operating status in both pellet and log operation.

All function can be regulated centrally using the integrated touch display. The intuitive graphic interface permits easy operation; all the settings can be made quickly and simply.

# Top efficiency - lowest emissions

A very great heat exchange surface together with optimum combustion air control leads to excellent fuel utilisation.

Fine continuous pellet dosing in an optimised burner pot made of high-quality grey cast iron leads to virtually complete combustion with very good exhaust gas values - and this is guaranteed in every operating phase.

The combination of temperature-controlled automatic air regulation and optimised wood retainer geometry enable combustion with minimum emissions at top efficiency in log operation.

### Note

The automatic control system means that during operation, the flame noise, pellets dropping and actuation of the electronic components permissible for living spaces are audible.

### Note

The innovative technology of our combination stove INDUO offers you a maximum of heating comfort, depending on the availability of the fuel the stove can be heated with pellets and / or logs without any modification.

Both cases are solid fuels that can cause a fogging of the door glass during the combustion, particularly with the very fine ash from wood pellets. By external influences such as chimney draft or pellet quality this coating can be very bright or dark black (especially with low power ). This is a natural process and is not a shortage.

We therefore recommend regular cleaning of the door glass, just because soot is an excellent insulator and thus the heat dissipation can be reduced.

If the stove is heated according to its function in the combined operation, a significant improvement can be achieved due to the higher temperatures in log wood mode.

# Burnback and flue gas flaps

The combi stove safety concept is based on double safeguards. If faultless operation is no longer ensured due to a component defect or power cut, the burnback flap in the pellet chute is released. This directly interrupts the connection between the pellet container and push in screw. Thus preventing pellet burnback. Closing the burnback flap at the same time opens the flue gas flap thus ensuring safe burning off of the fuel in the combustion chamber.

### Note

Check with every maintenance / cleaning the correct operation of the flue flaps.

# Overheating

A safety temperature limiter (STL) switches the stove off automatically on overheating. Once the stove has cooled, the STB at the stove rear must be unlocked manually (pressed). The stove is ready for operation again after acknowledging the error message at the touch display and activating the burnback and flue gas flap (see ACTIVATING THE BURNBACK AND FLUE GAS FLAP). The operating mode set is retained.

### Note

Maintenance and cleaning work must be performed if overheating occurs! If this error recurs, operation without danger is no longer guaranteed; notify customer service immediately.

### Low-temperature shutdown

The unit switches off if the stove cools below a minimum temperature. This switch-off may occur if pellet ignition is delayed.

### Electrical excess current protection

The stove has a main fuse (at the rear) to protect against excess current

# Component monitoring

All the electrical components used are continuously monitored during operation. If a component is defective or can no longer be actuated correctly, then operation is stopped and a warning or error message is issued (see WARNING AND ERROR MESSAGES).

# 6. INSTALLING THE STOVE

# General information



Only use heat-resistant sealing materials as well as corresponding sealing strips, heat-resistant silicon and rock wool.



Assembly may only be performed by authorised specialist companies



Also take care that the flue does not project into the free cross-section of the chimney.

Note

Please observe the regional safety and building regulations. Please contact your master chimney sweep in this context.

### Note

Your stove is intended for room-air independent operation. Thus the stove pipe connections must be tightly sealed permanently for this use. Use a heat-proof silicon to position the stove pipe on the conical supports of the flue tube nozzles and for insertion in the chimney flue lining.

Note

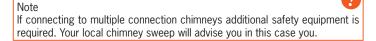
The stove should not be pushed on unprotected floors.

Tip Strong corrugated cardboard, cardboard or e.g. old carpet is useful to assist assembly and as a base. The stove can also be pushed on this cardboard or carpet.

We recommend original flue pipes from RIKA for proper connection.

### Connection to the chimney

- The device must be connected to an approved chimney for solid fuel. The chimney must have a diameter of min. 120mm.
- Avoid long flue pipes to the chimney. The horizontal length of the flue pipe should not exceed 1.5 m.
- Avoid to many bends of the flue gas pipes.
- There should not be more than 3 bends in the exhaust pipe.
- If you just can not connect directly to the chimney, please use a connection with a cleaning opening.
- Connections must be made of metal and must meet the requirements of the standard (install the connections airtight).
- Before installing a chimney calculation must be made. The evidence must be performed for single occupancy to EN13384-1 and EN13384-2 for multiple occupancy.
- The maximum draft of the chimney should not exceed 15Pa.
- The derivation of the flue gases must be guaranteed even during a temporary power outage.



# Connecting to a steel chimney

The connection must be calculated and shown with EN13384-1 and EN13384-2.

Use only insulated (double) stainless steel tubes (flexible aluminum or steel tubes are not permitted).

An inspection door for regular inspection and cleaning must be present.

The flue pipe connection to the chimney has to be air-tight.

# Combustion air

Every combustion process requires oxygen from the surrounding air. This socalled combustion air is removed from the living are in the case of individual stoves without external air connections.

This air removed must be replaced in the living space. Very tightly sealed windows and doors in modern flats may mean that too little air replaces that used. The situation also becomes problematical due to additional venting in flats (e.g. in the kitchen or WC). If you cannot feed in external combustion air, then air the room several times a day to prevent negativce pressure in the room or poor combustion

### Note

Please note that problems may arise due to updrafts in the case of combustion air supply from an integrated chimney ventilation shaft. If the combustion air flowing downwards is heated it may rise and thus counter the chimney with a resistance which in turn reduces the negative pressure in the combustion chamber. The chimney manufacturer is to guarantee that the resistance for the combustion air is a maximum 2 Pa even in the least favourable operating state of the chimney

# Feeding in external combustion air

only for devices which are able to run in romm-air independent operation.

- Combustion air must be fed to the stove from outside via a sealed pipe for operation independent of the room air. According to EnEV, it must be possible to shut off the combustion air pipe. The open/closed setting must be clearly recognisable.
- Cut the perforated right rear wall out with a hacksaw.
- Connect to the intake nozzle either a pipe Ø125mm (logs stove and combistove) or Ø50mm (pellet stove) and fix this with a pipe clamp (not included in scope of supply!) On pellet stoves with longer connection pipes, the diameter should be enlarged to some Ø100mm after approx. 1m.
- To ensure sufficient air intake, the line should not be longer than 4m and should not have too many bends.
- If the line leads outside it must have a windbreak.
- In extreme cold pay attention to icing of the air intake opening (check).
- It is also possible to suction in combustion air directly from another sufficiently vented room (e.g. cellar).
- The combustion air pipe must be tightly connected (adhesive or cement) permanently to the air nozzles of the stove.
- If you do not use the stove for a long time, please close the combustion air intake to prevent the stove from moisture.

If one or more of these conditions does NOT apply, the result is poor combustion in the stove and negative pressure in the installation room.

# 7. ASSEMBLY/DISMANTLING STONE AND OPTIONS



Only work on the unit when the mains plug has been disconnected and the stove has cooled completely.

Note

During assembly / dismantling do not allow objects (screws etc.) to fall into the pellet container – they can block the screw conveyor and damage the stove.

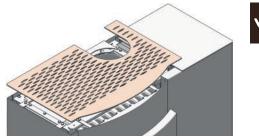
Note

During any conversion work, take particular care of your fingers and any panels and stove attachments.

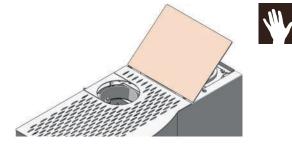
Select soft bases to prevent scratches to your living space furniture and stove panels.

# Dismantling stone

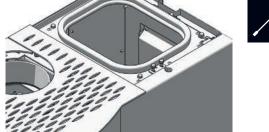
Lift the cover of the stove by carefully pressing upwards and place it on a soft, clean base.



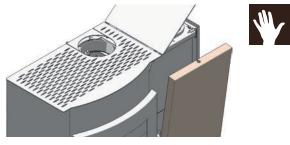
Open the container lid to the stop, it remains open in this position.



Open the two hex head bolts using a suitable socket spanner and remove the stone holder.



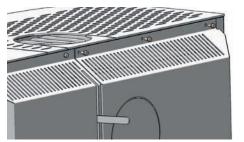
Tip the stone slightly forwards and lift it out of the floor bracing. Pay attention to the edge of the stone to prevent damage. Place the stone on a suitable base.



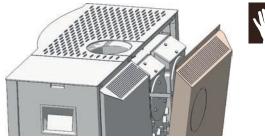
Re-assemble the parts in reverse order.

# Conversion to flue pipe connection rear

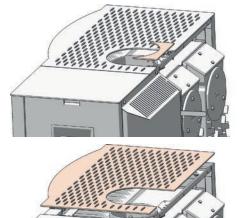
Remove the left rear wall by opening the 3 top hex head bolts.



The rear wall is mounted at the floor, it is removed by pressing it back slightly and lifting.

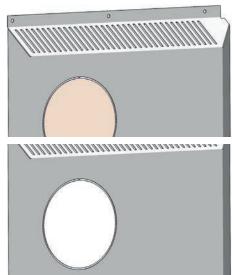


Lift the two covers of the stove by carefully pressing upwards and place them on a clean base.





Cut the perforated opening in the left rear wall with a hacksaw and beburr the edges with a round file.



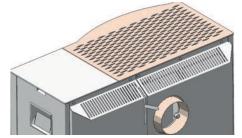
Swap the flue connections and the cooking cover.



Re-assemble the parts in reverse order

The flue pipe connection rear option permits use of a closed cover (without flue pipe recess). The closed cover must be ordered separately. You dealer can provide further information..

With the option for rear flue connection you have the possibility to set up a closed lid No.: E15143. The closed lid must be ordered separately. More detailed information can be obtained from your dealer.



# 8. INTERNAL CONTROLS – TOUCH-DISPLAY

The stove has a modern programmable microprocessor control. The individual stove functions can be set by the user via the touch display.

Note

Manipulation of hardware components may only be performed by trained specialist dealers and service. Incorrect handling of these parts leads to loss of warranty and guarantee claims!

# Basics

All settings and functions can be made via the integrated touch screen. Actions are initiated by touching the symbolic buttons. The touch display reacts to both finger touch and touch display pen

### Note

Please do not use any sharp objects to prevent damage to the touch display.

# Operation

Each input button has the status inactive, active and depressed. If an input button on the display is greyed-out, i.e. inactive, then it only reserves space and cannot be selected. This is the case if no response can be expected from pressing this input button (e.g. increasing the heat output if it is already at 100%; switching on if the stove is already switched on, ...)

Active input buttons can be pressed at any time, in confirmation the status changes to depressed; this status is retained as long as the button is pressed. After pressing the input button, the status returns to active or inactive.









inactive

active

depressed

# Input posibilities



# **OFF-Button**

Pressing the OFF button switches off the section concerned.

### **ON-Button**

Pressing the ON button switches on the section concerned.



The stove is switched ON or OFF in the HOME main menu. The respective button must be depressed for 2 seconds to prevent inadvertent switching



on or off.

Note

### **MINUS-Button**

Pressing the MINUS button reduces the value in the display box concerned.



### **PLUS-Button**

Pressing the PLUS button increases the value in the display box concerned.



### **NAVIGATION-Button**

Pressing the NAVIGATION button takes the user to the corresponding main menu.

# **INPUT-BOX** 328

There is an input box for input of a multi-digit, numerical value.

# NUMERICAL



A number pad appears for input of a multi-digit, numerical value.



# The input value is confirmed by pressing the ENTER button.



**CANCEL-Button** The value displayed is deleted by pressing the CANCEL button.

SUBMENU-Button

ACTIVE-Button

the ACTIVE button.

**Heating Times** 

Output

# Displays

# Flame Temp [C°]

### INFO-hox

This box provides information via the adjacent value in the display box.

Pressing the SUBMENU button takes the user to the corresponding submenu.

The option shown is selected by pressing



328

### **DISPLAY box (ON/OFF)**

A display box with ON or OFF is shown for options that can be switched ON or OFF.

### **DISPLAY** box (numerical)

A number is shown for values represented numerically.



# **ENTER-Button**

### Note

The unit may only be put into operation when assembled completely!

The USB stick supplied must be plugged into the interface on the rear of the stove before the unit can be taken into service for the first time.

### **USB** Connection



A start screen appears after connection to the mains supply. The language selected is changed by pressing respective language button on the screen.



The software is automatically updated after language selection. This process takes approx. 2 min.

Note

Während des Software-Updates ist eine Unterbrechung der Stromversorgung unbedingt zu vermeiden. Hard

A confirmation display appears after successful software update; the stove must be disconnected from the mains and the USB stick removed

# First steps

Once the stove has been reconnected to the mains, the display changes to the date and time setting by pressing the screen.

The input specified here only has to be made on first use; however it may be changed at any time in the main menu SETUP settings.

The date and time setting is made numerically using the number pad.



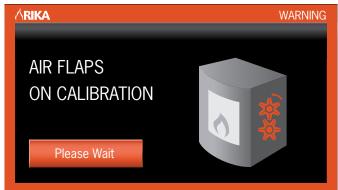
The C button acts as back button and deletes the input in the display box selected.



Once all data has been entered correctly, an ENTER button appears which confirms the input and saves the data.

### AIR FLAP CALIBRATION

The function of the air regulation components is tested after each reconnection of the stove to the mains. This process may take up to 5 minutes.



# Activating the burnback and flue gas flap

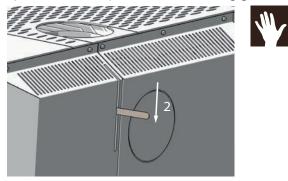
The burnback flap must be pulled out using the handle supplied (1) until it remains open.



### Tip

The burnback flap can be pushed back in without problem due to the special mechanism (3), the black galvanised shaft is thus no longer visible from the outside.

The flue gas flap lever must then be pressed down (2) until it engages.



A warning appears on the touch display and the stove cannot be taken into operation as long as the burnback flap is not pulled out and the flue gas flap is not pressed down.



The warning is deleted as soon as the two flaps are activated and the  $\ensuremath{\mathsf{Home}}$  menu appears.

# HOME - main menu

The HOME main menu is the starting point of the stove control system and is divided into three sections.



### I NAVIGATION SECTION

Navigation among the individual main menu levels.

Tip The current main menu is marked in colour to ease navigation.

### **II SETTINGS SECTION**

Setting the heat output and the room temperature as well as ON and OFF switch for stove.

### **III DISPLAY SECTION**

Display of the current date and time, operating status and mode as well as additional information symbols.

# Main menu levels

The complete control system of the stove is divided into 4 main menu levels (HOME, MODE, SETUP und INFO; these levels are differentiated based on the following functions:



HOME-status level

Stove start/stop, setting heat output, room set temperature, current stove status display



MODE-operating mode level Selection of the required operating mode (manual, automatic, comfort)



SETUP-setting level Setting of heating times, settings for various options, ...

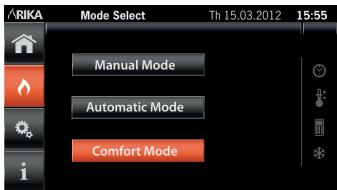


INFO-information level

Software version, pellet consumption, hours in operation, information on the individual components,...

# MODE - mode selection

The various heating modes are selected in this display.



### Manual mode

The stove is operated at a pre-set heat output.

### Automatic mode

Individual heating times may be activated in addition to the pre-set heat output.

### Comfort mode

Regulation to the pre-set room temperature is automatic in this selection. Heating times may also be activated.

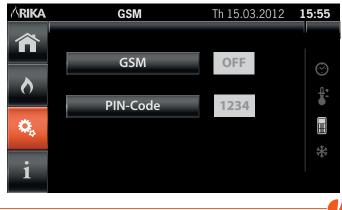
### Note

The comfort mode can only be selected if a functioning room sensor is connected

### SETUP - settings

In the SETUP – Settings main menu, heating times can be programmed, options activated or then date and time set etc.

The required submenu is selected by pressing the corresponding button



Note

If functions are inactive due to lack of the respective module, they cannot be selected.

### SUBMENU ITEMS

### **Heating times**

The ON and OFF switching times can be programmed in this submenu. A decreasing temperature for the comfort mode can also be set.

### Room sensor

Any deviation between the current displayed and actual room temperature can be compensated for.

### GSM

If a modem is connected, the stove GSM function can be activated and the  $\mbox{PinCode}$  required entered numerically.

### Frost protection

This function allows selection of a minimum temperature at which the stove starts to heat. The frost protection function is independent of any external requirements and any set room temperatures. The function has top priority.

### Transverse current blower

The optional transverse current blower can be activated in this submenu.

### Child safety device

To prevent undesired operation, a code can be determined to be entered every time the screen saver is left.

5

### Date/time

Date and time settings can be made.

### Screen saver

The waiting interval until the screen saver is activated is set in this submenu.

### USB update

This menu level concerns the software update of the stove.

### Service (not accessible to final customers)

Additional information for the specialist dealer or service.

# Heating time programme

The heating time programme operates the stove time-controlled. As soon as the heating time function has been activated (ON) the buttons decreasing temperature (only with room sensor) and heating time programme can be selected.



Individual or several days can be selected at the same time and programmed individually in the heating time programme.

The week days selected are marked ORANGE.

By selecting the now active heating time buttons (heating time I and heating time II), the required ON and OFF switching times can be entered numerically.

The week day buttons are shown GREEN after confirmation.

Repeat pressing of week day buttons already programmed permit viewing of the defined heating times or these can be deleted again using the cancel button (right next to the time displayed).



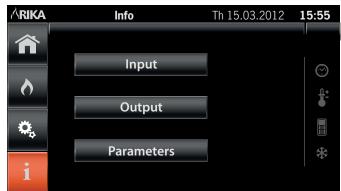
### Tip

In the case of selected week days on which identical heating times have been programmed, the respective settings of heating time I and/or heating time II are shown.

If week days with different heating times have been selected then the hash symbol appears in the time display (#:#).

# INFO - main menu

The most important current parameters can be viewed in INFO - main menu.



### SUBMENU ITEMS

### Inputs

All available sensor data and switch statuses are shown.

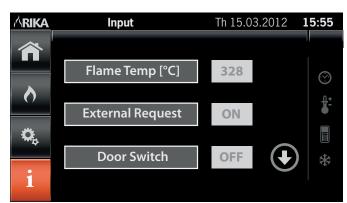
### Outputs

All components controlled by the microprocessor are shown.

### Parameters

All operating parameters are shown

# INFO – inputs



### Flame temperature

Display of the current temperature of the combustion chamber [°C]

### Room temperature

Display of the current ACTUAL temperature in the room [°C](only with connected room sensor)

### Ext. demand

Displays whether an external demand is active (ON) or inactive (OFF).

### Dump grate contact

Displays whether the dump grate is in the horizontal position (ON).

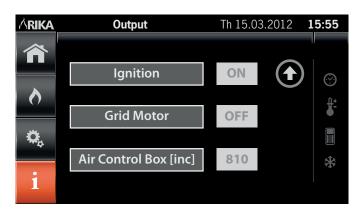
### Door contact switch

Shows whether the combustion chamber door is closed (ON) or open (OFF).

### Container lid

Shows whether the pellet container lid is closed (ON) or open (OFF).

# INFO – outputs



### **Discharge motor**

Current speed of screw motor conveying away from the pellet container (range: 0...1000)

### Feed motor

Current speed of screw motor conveying to the fire trough (range: 0...1000)

### Flue gas blower

Current speed of flue gas blower. (Range: 0...2500)

### Ignition element

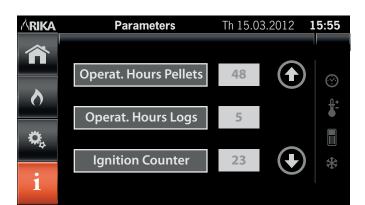
Shows whether the ignition is switched on (ON) or switched off (OFF).

### Dump grate motor

Shows whether the dump grate motor is actuated (ON) or not (OFF).

### Air controller

Current air flap position (range: 0...1000)



### Hours in operation

Display of previous total operating hours.

### **Conveying total**

Display of total pellet amount supplied up to present.

### **Conveyor cleaning**

Display of the amount of pellets to be conveyed until the next cleaning.

### Ignitions

Current number of all previous pellet ignitions.

### Software stove

Current stove control software version.

### Software display

Current software version of the touch display.

### Main state

Operating status of main control process.

### Sub state

Operating status of sub control process.

### Screen saver

Depending on the interval set without touching the display, the lighting is dimmed and power-saving mode is activated, a freeze image appears.

Renewed touching of the display activates the lighting and switches to the  $\operatorname{HOME}$  main menu

### Tip

The interval to activation of the power-saving mode can be set under Setup – screen saver.

# Additional information

In nearly all the menu levels there are four symbols in the right outer display area showing the activated settings

# HEATING TIMES

This symbol is highlighted if individual heating times are activated.

### ROOM SENSOR

This symbol is highlighted if a functioning room sensor is connected.  $\label{eq:connected}$ 



### FROST PROTECTION

This symbol is highlighted if the integrated frost protection is activated.

### Note

The frost protection function can only be activated with connected room sensor. If activated, it is executed in all operating modes (also in MANUAL and AUTOMATIC).



This symbol is highlighted if a functioning GSM module has been connected and activated.

### Note

The additional information symbols can only be highlighted if the corresponding modules have been connected to the stove and activated.

# 9. COMFORT OPTIONS

We would point out that auxiliary units may only be connected to the RIKA interface connection and external connection socket by authorised specialists.

# RIKA room sensor/RIKA radio room sensor

This option permits control of your stove via room temperature. You can set both the room temperature and the heating times required. A room temperature selected by you is observed during the heating times.

Please see the operating instructions for the option RIKA room sensor and wireless room sensor for more detailed information.

# <u>RIKA GSM Control</u>

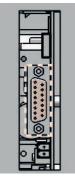
Your stove can also be controlled via a mobile phone as an additional option.

Please see the operating instructions for the telephone option – GSM for more detailed information.

# RIKA interface for various options

### for various options

The RIKA ROOM SENSOR, the RIKA WIRELESS ROOM SENSOR and the RIKA PHONE OPTION – GSM are to be connected to the interface (stove rear) using the connection cable supplied.

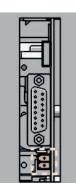


# External room thermostat

Your stove has an interface on the rear wall to which you can connect a customary room thermostat. This requires a 2-pole cable of  $0.5-0.75~\text{mm}^2$  cross-section that you have to connect instead of the cable bridge fitted for delivery

# External connection cable bridge

(condition as delivered)



If the control of your stove is to be assumed by an external room thermostat, you have to connect your external room thermostat (1) instead of the standard integrated cable bridge (2).

The connected room thermostat can be operated in either MANUAL or AUTOMATIC MODE. In both MODES, the current set heat output is used, in AUTOMATIC MODE the heating times set at the stove can also be activated.

You can see whether the external demand is currently activated in the INFO main menu in submenu item Info - inputs.

If your stove receives an external demand to stop operation, it takes approx. 5 minutes until it switches off. All further settings required to your thermostat can be taken from the respective room thermostat operating instructions.

### Note

Operation is not possible unless either a cable bridge or an external room thermostat is connected. The external demand has priority over all operating modes (MANUAL/AUTOMATIC/COMFORT).

# 10. MODES

### Note

When operated correctly, your stove can not overheat. Improper operation may shorten the life expectancy of electrical components (blowers, motors and electric control) and is not allowed!

# Pellet operation manual/automatic/comfort

### MANUAL MODE

The pellet burner start and stop (ON/OFF button) as well as the setting of the required heat output (PLUS/MINUS button) are executed via the display in the HOME – main menu.

### AUTOMATIC MODE

The change between standby operation and neutral (ON/OFF button) as well as the setting of the required heat output (PLUS/MINUS button) are executed via the display in the HOME – main menu.

Additional heating times can be activated in AUTOMATIC mode and the heating time programme can be programmed.

Pellet burner start is effected in standby operation (ON) within the heating times (or always with deactivated heating times).

Pellet burner stop is performed outside the heating times.

Stove start is not possible in neutral status (OFF), the system is switched off.

### **COMFORT MODE**

The change between standby operation and neutral (ON/OFF button) as well as the setting of the required room set temperature (PLUS/MINUS button) are executed via the display in the HOME – main menu.

Additional heating times can be activated in COMFORT mode.

Pellet burner start is effected in standby operation (ON) within the heating times (or always with deactivated heating times) and if the actual room temperature is below the current room set temperature.

Pellet burner stop is effected either outside the heating times or if the actual room temperature is above the current room set temperature.

Stove start is not possible in neutral status (OFF), the system is switched off.

### Fuel addition pellet operation

### Note

CAUTION when filling! Do not allow the pellet sack to come into contact with the hot stove. Immediately remove any pellets that have not entered the supply container!

We recommend maintaining an appropriate level in the supply container to prevent the fire going out due to lack of fuel. A 15 kg sack of pellets can be added to the stove once half the pellets in the container have been used up. Check the level frequently. However the container lid should be kept closed, except during filling.

When filling the container during operation (opening of the container lid), the fan is started up and the pellet conveyor is stopped; operation is only resumed once the container lid is closed (see WARNING AND ERROR MESSAGES)

Pellet container capacity (see TECHNICAL DATA).

Log operation

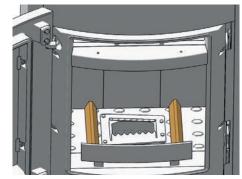


### Note

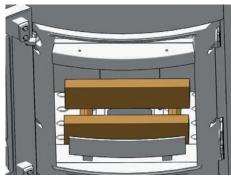
Your stove cannot overheat if operated correctly. However incorrect operation may shorten the service life of the electrical components (blower, motors and control system) and is therefore not permitted!

### CORRECT HEATING UP

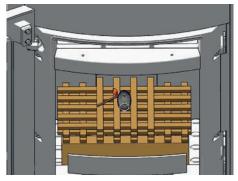
Open the combustion chamber door and place left and right 2 small pieces of chipboard longitudinally on the combustion chamber floor.



Place 2-3 logs crossways to this chipboard.



Now place further chipboard pieces crossways and place a firelighter in the middle underneath the chipboard (if necessary some uncoated paper can be placed under the chipboard instead of the firelighter).



Now set the firelighter alight (or the uncoated paper) and close the combustion chamber door.

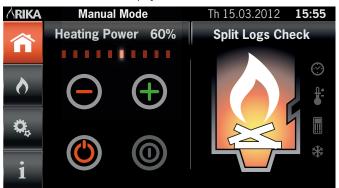
Correct heating up counteracts above all excessive smoke during heating up.

Amount filled for heating up ~ 2kg

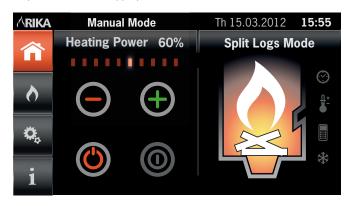
Amount added up to 1.3 - 2.6kg

### **AUTOMATIC OPERATION**

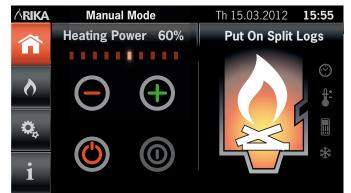
Once the combustion chamber door has been closed, the operating status log check is issued on the touch display.



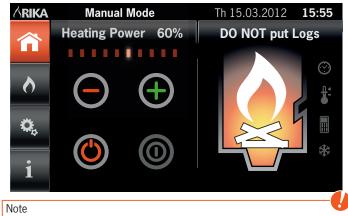
Depending on temperature, it takes up to 20 minutes until the status display changes to log operation and the stove starts to regulate the burn-off. This time is required to obtain an appropriate firebed.



The time to add logs varies according to the respective ambient influences, generally the addition phase takes approx. 5-10 min. The status display on the touch display changes between **log operation** and please **add wood**.



If an addition phase is missed, no logs may be added subsequently since the ignition of these cannot be guaranteed. The status display on the touch display changes between log operation and DO NOT add wood.



The heating time, room temperature and frost protection functions as well as external demand are deactivated during the entire log operation. These functions are only re-activated after log operation.

# Manual regulation

(CURRENTLESS OPERATION)

Note The combi stove must be disconnected from the mains for manual operation.

### Note

Any procedure other than that stated below may lead to damage to the components and inevitably to loss of warranty

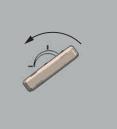
Insert the socket spanner supplied in the sleeve as shown. Turn it clockwise until a slight stop is detected.



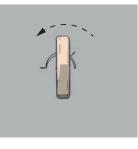
Remove the socket spanner from the opening and insert it again in the horizontal position



Turn the spanner ant-clockwise until it is flush with the marking in the side panel (approx. 45°C). It is now in heating up position.



Turn the spanner after the heating-up phase anti-clockwise step by step to regulate the burn-off manually. (Secondary air range)





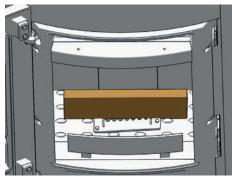
# Combined operation

Automatic fuel detection makes changing between pellet and log operation possible.

2 possibilities of combined operation are stated as examples:

### Automatic ignition of logs

Place 2 logs in the combustion chamber before you start pellet operation. Ensure that one of the two logs lies above the fire trough to facilitate burning and shorten the ignition time.



Start pellet operation by pressing the ON button. The combi stove starts in **ignition** status, changes to **log check** after successful ignition and to **log operation** status once logs have been detected.

### Note

If no more logs are reloading the pellet operation starts automatically again because the unit is still turned on.

### Automatic log detection during pellet operation

Open the combustion chamber door during pellet control operation and place on the first load 2 logs  $\dot{a} \sim 0.7$ kg in the chamber. Ensure that the two logs lie above the fire trough to facilitate burning and shorten the ignition time.

Once you have closed the combustion chamber door. Status changes from control operation to **log check** and after log detection to **log operation**.

Once the log has burned down, pellet operation starts automatically since the combi stove is still switched on.

### Note

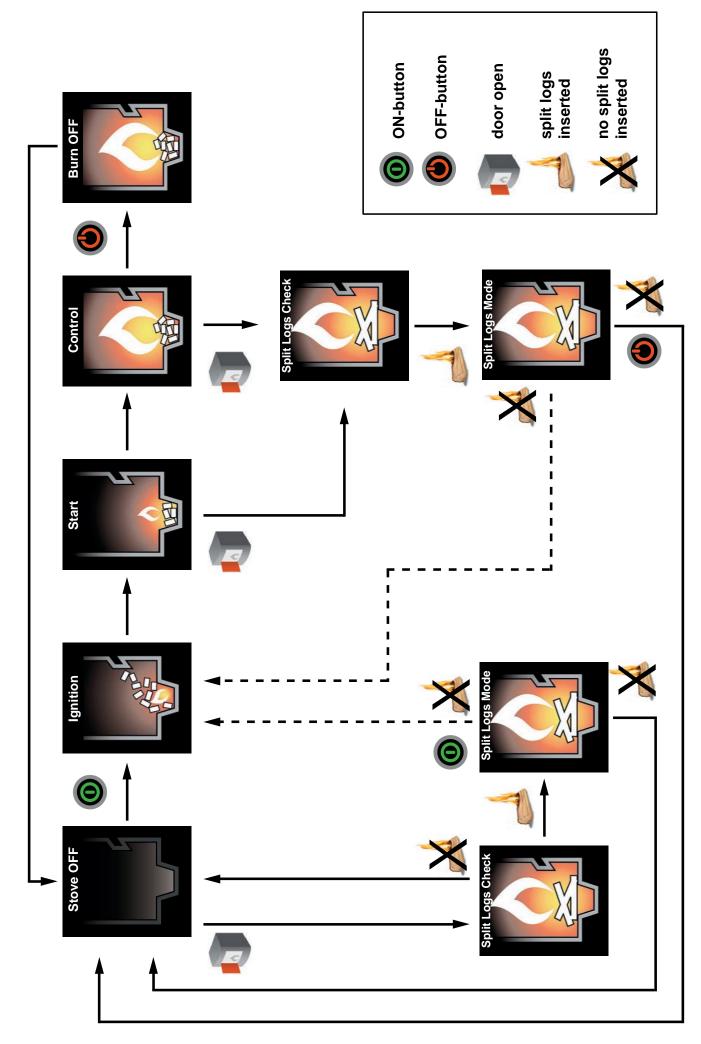
If no more logs are reloading the pellet operation starts automatically again because the unit is still turned on.

### Note

The stove may change to standby operation in AUTOMATIC or COMFORT mode since there is no demand on the control system (outside the heating times and actual room temperature above the set room temperature).

If you switch the combi stove off during log operation by pressing the OFF button, the status changes to neutral after burn-down of the log

# 11. FLOW DIAGRAM PELLET - LOG OPERATION



# 12. WARNING AND ERROR MESSAGES

During operation, unforeseen circumstances or intervention by the user may lead to malfunctions or interruptions of the control process. There is a differentiation between warnings and error messages. Warnings are interruptions caused by the user; they can be eliminated by correct actions. Error messages are malfunctions of components or discharges during operation. These must be acknowledged by the user so that operation can continue.

### Note

If error messages recur directly, customer service is to be notified immediately. In the case of error messages that pose a safety risk, burnback and flue gas flap is activated and the stove is automatically switched off.

# Warnings

| wurnings   |   |   |
|--|---|---|
| display  | meaning   | action to be taken  |
| ARIKA WARNING<br>DOOR<br>OPEN<br>Please Close Door   | Display for open combustion chamber door.   | Close the combustion chamber door   |
| Arika WARNING<br>PELLET CONTAINER<br>LID OPEN<br>Please Close Door   | Display for open pellet container lid.  | Close the pellet container lid.   |
| Arika Warning<br>PELLET HOPPER<br>LID AND<br>DOOR OPEN<br>Please Close Doors   | Display for open combustion chamber door and pellet container lid.  | Close the combustion chamber door and the pellet container lid.   |
| AIR FLAPS<br>ON CALIBRATION<br>Please Wait   | The air flaps are re-calibrated on every new start of the stove control system.   | This process takes up to 4 minutes and cannot be interrupted.   |
| Anica Warning<br>BURNBACK AND<br>FLUE GAS FLAP<br>Pull Down Lever  | The two safety devices burnback flap and flue gas<br>flap are not in heating position. Only currentless log<br>operation is possible as long as these devices are<br>not in position. This warning is shown after various<br>error messages and after power cuts. | The burnback flap (1) must be pulled out using the handle supplied until it remains open. The flue gas flap lever must then be pressed down (2) until it engages. |
| KRIKA WARNING   ROOMSENSOR Image: Comparison of the second | There is no valid signal between the stove control system and the room sensor.  | Check if the sensor is plugged in correctly   |
| ARIKA ERROR<br>PLEASE PERFORM<br>SERVICE   | Perform service (maintenance)   | Perform service (see CLEANING AND MAINTE-<br>NANCE)   |

EN

Errors

| display                                 | meaning   | action to be taken  |
|---|---|---|
| NO<br>PELLETS                           | There are no longer sufficient pellets in the container.  | Acknowledge error message and refill pellets.   |
| NOT<br>IGNITED<br>O                     | Ignition cannot be concluded due to lack of ignition detection.   | Acknowledge error message and check pellet<br>supply container. Open combustion chamber door<br>and clean fire trough if necessary. Stove can then<br>be restarted. |
| ARIKA ERROR<br>AIR FLAPS<br>DEFECT<br>O | The air flaps required for automatic air regulation cannot move to their position correctly.  | Acknowledge error message and again wait for air flap calibration.  |
| GRID<br>DEFECT                          | The dump grate cannot complete the dump process provided for.   | Acknowledge error message and check for any blockage of the dump grate at the fire trough.  |
| CONVEYOR<br>DEFECT<br>O                 | One of the two screw motors for pellet conveying can no longer be actuated.   | Acknowledge error message and restart stove.  |
| ARIKA ERROR<br>STL<br>ACTIVATED<br>O    | The STL (safety temperature limiter) has activated.<br>The stove overheated and switched off automati-<br>cally due to a safety risk. | Manually deblock STL at stove rear wall (press) acknowledge error message and restart stove   |
| FLAME SENSOR<br>DEFECT<br>O             | The flame temperature sensor in the combustion<br>chamber does not give a realistic temperature to<br>the stove control system.       | Acknowledge error message and restart stove.  |
| ARIKA ERROR<br>FAN<br>DEFECT            | The flue gas blower specified speed was not reached.  | Acknowledge error message and restart stove.  |
| ARIKA ERROR<br>CONVEYOR<br>JAMMED       | The conveyor can not be controlled correctly.   | Remove any encrustations in the burn pot. Acknow-<br>ledge error message and restart stove.   |

# 13. CLEANING AND MAINTENANCE

# Basic information

### Note

Your stove must be switched off and cooled before any maintenance work is performed. Ensure that you do not vacuum into the combustion air line during heating operation during any cleaning (vacuuming). You could vacuum out embers – FIRE RISK!

Note

SERVICE appears in the display after consumption of 700 kg pellets. Cleaning and maintenance is to be performed.

This message can be acknowledged by pressing ENTER and operation can be continued. The number of SERVICE messages is stored in the background.

Note

Only work on the unit when the mains plug has been disconnected.

The frequency with which the stove requires cleaning and the maintenance intervals depend on the fuel you use. High moisture content, ash, dust and chips may more than double the maintenance required. We would like to again point out that only tested and recommended pellets or logs may be used as fuel.

### Tip

-0

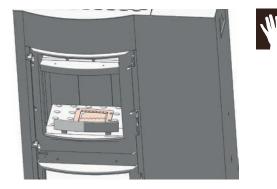
wood as fertiliser - The mineral content of the wood remains in the combustion chamber as ash as a residue of the combustion. This is an excellent fertiliser for all plants in the garden; it is a completely natural product. The ash should be stored first and extinguished with water.

Note

Ash may contain embers - only place ash in sheet steel containers.

# Cleaning the fire trough

Despite the automatic ash dumping prior to and during heating operation, care should be taken that the air intake openings are not blocked with ash or clinker. Remove the clinker using the wire brush supplied and vacuum out the fire trough.



### Note

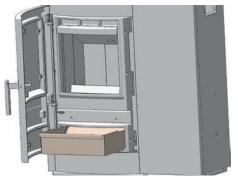
Clean the fire trough regularly. Only clean when cold, when embers are extinguished!

### Note

To prevent "clinker formation" it is advisable to operate the stove sometimes on higher power level, or according to its combination function the operation with logs.

# Ampty the ash drawer

Empty the ash drawer regularly. The ash drawer is simply pulled forward with the combustion chamber door open



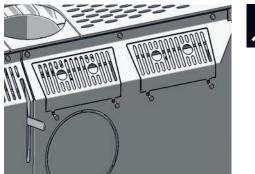


The viewing window becomes coated in the case of solid fuels, particularly with the very fine ash of wood pellets, light or dark depending on the pellet quality (especially with low output). This is a natural process and does not constitute a defect. The glass can be cleaned best with a moist cloth. Stubborn dirt can be removed with a special cleaner available from your stove dealer.

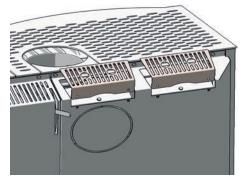
# Cleaning flue pipes

The flue pipes should be cleaned at least 2 x a year or after approx. 700 kg pellets. The flues are behind the combustion chamber.

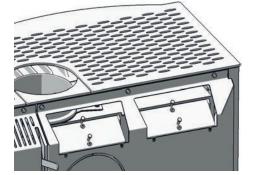
Remove the hexagonal screws of both covers at the rear side.



Now you can remove the covers.

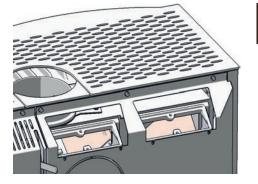


Loose the screws of the heat exchanger lids and remove them.



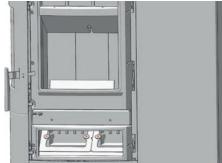


Clean the heat exchangers with the provided wire brush.

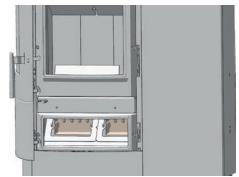




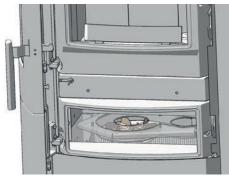
Dismantle the two cleaning covers behind the ash drawer by loosening the 4 milled nuts.



Vacuum out the chambers in the lower section of the flue pipes.



Also clean the impeller of the flue gas blower by vacuuming out the suction opening.



Re-assembly the parts removed in reverse order.



Note Your stove i

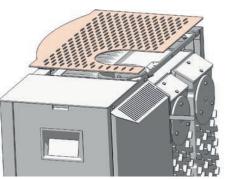
Your stove may suck in false air via incorrectly sealed cleaning covers; this air may lead to incomplete combustion in the fire trough and thus piling up of pellets.

# Cleaning the convection air openings

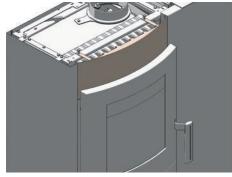
Suction off any dust deposits from the convection air openings at regular intervals. The stove should be cleaned thoroughly prior to the start of the heating season to prevent excess odour.

# Cleaning flue gas deflector section

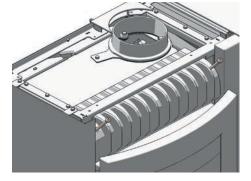
Lift the cover of the stove by carefully pressing upwards and place it on a soft, clean base.



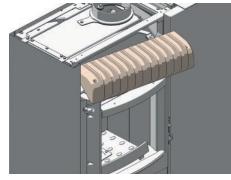
Open the fixing bolts of the top cover plate and place it on a soft, clean base.



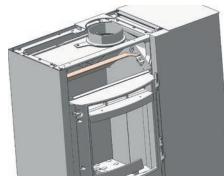
Open the fixing bolts of the cast cover.



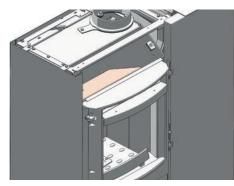
Turn the cast cover carefully out of the frame and place it down.



Remove the top sheet steel deflector.



Vacuum out the deflector section.



Re-assembly the parts removed in reverse order.

# Cleaning the flame temperature sensor

Remove the dust deposits from the sensor at regular intervals. Use a clean cleaning cloth or newspaper.



# Cleaning the pellet container

Do not refill the completely empty container immediately; remove the residues (dust, chippings etc.) from the empty container. The unit must be disconnected from the mains!

# Checking door seal

The condition of the seals at doors and glass should be checked at least 1 x per year. Repair or replace seals depending on condition.

# Checking chimneay connection

Inspect and clean connection. Accumulated fly ash may impair the performance of the stove and pose a safety risk.



# 14. PROBLEMS - POSSIBLE SOLUTIONS

# Problem 1

Fire burns with weak, orange flame. Pellets heap up in fire trough, window sooted up.

### Cause(s) pellet operation

- Insufficient combustion air
- Poor chimney draught
- Stove is sooted over inside

### Cause(s) log operation

- Poor chimney draught
- Too much fuel
- Damp wood
- Incorrect heating up
- Stove is sooted over inside

### Possible solutions pellet operation

- Remove any ash or clinker from the fire trough that may block the air inlets. If possible swap to better pellet quality (see CLEANING AND MAINTENANCE)
- Check whether flue gas pipes are blocked with ash (see CLEANING AND MAINTENANCE).
- Check whether the suction nozzles and air inlet pipe or flue tube are blocked.
- Check door and cleaning cover seals for leaks (see CLEANING AND MAINTENANCE)
- Clean blower impeller (see CLEANING AND MAINTENANCE)
- Have service performed by authorised specialist company.

### Possible solutions log operation

- Every glass plate must be cleaned from time to time (depending on use) with glass cleaner.
- Use dry wood and correct fuel amounts (see BRIEF INFORMATION ON FUEL - LOGS)

### Problem 2

Stove smells strongly and smokes outside.

### Cause(s) pellet / log operation

- Burning-in phase (taking into service)
- Stove has accumulated dust and/or dirt

### Possible solutions pellet / log operation

- Wait to end of burning-in phase and vent sufficiently
- Suction off any dust deposits from the convection air openings at regular intervals

### Problem 3

Flue gas discharge when wood is added and during heating phase.

### Cause(s) pellet / log operation

- Combustion chamber door opened too fast
- Too much ash in combustion chamber
- Adding logs to snappy
- Chimney draught too low
- Flue pipe connection leaks
- Logs combustion still running (visible flame)

### Possible solutions pellet / log operation

- open the combustion chamber door moderate
- regular cleaning of combustion chamber (vacuum)
- Adding logs carefully
- Check chimney
- Check connections and if necessary re-seal
- Add logs after flame is gone (display: "please add logs")

### Note

Please note that checks on the control system and wiring ma only be performed in unit switched dead. Any repairs may only be performed by trained specialists.

### Tip

If a malfunction message occurs, the cause must first be remedied; the unit can be put back into operation by acknowledging the malfunction at the touch display.

# 15. INSTRUCTIONS FOR COMMISSIONING PROTOCOL

### FOR PELLET AND COMBI STOVES

The commissioning protocol is to be treated as a documents and serves as the basis for the warranty and guarantee terms. It is to be completed entirely, in particular the stove data and addresses, the work to be performed is to be ticked off after completion. The signatories confirm with their signatures that all the items on the list have been concluded properly.



Please return 1 completed protocol for putting into service to RIKA Innovative Ofentechnik GmbH, Müllerviertel 20, A-4563 Micheldorf.

### **Electrical periphery**

It is important that the connection socket in the electrical periphery is earthed. The operability of any room thermostat present must be checked. The execution of commands is to be established by phoning in the case of a GSM modem.

### Exhaust gas system

The exhaust line, stove and combustion air inlet are part of the combustion system as a whole; therefore the correct execution must also be checked. The plug connections should be tight in general since the system works with excess pressure. The exhaust tube has a diameter of 150 mm which is sufficient for short distances. In the case of several changes in direction, the resistance of the exhaust system can increase with the flue to such an extent that the combustion quality suffers and/or noises arise from the greater flow speed. Correct determination of the chimney draught can only be performed at nominal thermal output and serves to evaluate the chimney. If the draught is more than 15 Pa, then a draught limiter should be installed.

### **Stove functions**

These are the basic stove functions that are to be checked and ticked off. The stove is ready for operation if these functions are ensured.

### **Operator instruction**

This is one of the most important points in the putting into operation. It is very important that the operator understands the stove properly and is prepared to assume responsibility for the basic tasks required for operational safety.

In particular the connection between special features of a biomass heating system and his obligations as well as the warranty and guarantee terms must be explained. e.g. non-tested pellets and screw blockers, lack of cleaning or maintenance and stove malfunctions. Thorough instruction can prevent many complaints.**Stove functions** 

Explanation of the processes in the stove during ignition, normal operation, cleaning phase etc.

### Control

Explain operator's possibilities to intervene, empty pellet container, room thermostat, GSM modem, functions and settings, program times if necessary. Operating instructions: Handover and reference to the content to the following points, is a document.

### Warranty terms

Difference between warranty (statutory) and guarantee (voluntary), terms of guarantee, determination of wearing parts, reference to pellet quality to be used and the consequences of poor quality.

### Cleaning instructions

Ash and dust occurs with a biomass heating unit. The fire trough is to be cleaned regularly with regular heating operation (in the case of pellet operation, the drilled air holes in particular must be free of residues). The ash drawer is to be emptied regularly. The flue gas pipes are to be cleaned once or twice in the heating season depending on stove type; by a specialist company is best.

### Maintenance

Maintenance work after defined burn-off output is to be performed by specialist company, including thorough cleaning.

### Combustion

All doors must close tightly to prevent intake of false air.

Note

Please contact your warranty partner for any warranty questions or claims. This is your dealer or installation company. No warranty claims can be accepted without proper putting into operation, proper operation according to the operating instructions and the supplements in this information sheet.

| Protocol for putting into operation for RIKA pellet and combi sto | oves date: |
|---|------------|
| Installation address  | Dealer     |
| Name:   | Name:      |
| Street:   | Street:    |
| City:   | City:      |
| Telephone:  | Telephone: |

### Stove data

| Stove type:           | Casing undamaged       |  |
|-----------------------|------------------------|--|
| Serial number:        | Operating instructions |  |
| Software version:     | Warranty documents     |  |
| Touchdisplay version: | Door opener            |  |

### **Electrical periphery**

| Connection socket earthed | GSM modem present |  |
|---------------------------|-------------------|--|
| Room thermostat present   | Function checked  |  |

### Check of system components

| Combustion chamber door seal checked           | Ease of movement burnback flap checked (combi) |  |
|--|--|--|
| Ease of movement flue gas flap checked (combi) |  |  |

### Exhaust line / chimney

| Diameter | Connection leakproof |  |
|----------|----------------------|--|
| Bends    | Chimney draught      |  |

### Stove functions

| Pellet container filled   | Grid turns (360°) und keeps in heating position |  |
|---|---|--|
| Tested pellet quality according to Önorm/DIN plus/<br>ENplus-A1 | Ignition element glows                          |  |
| Electrical connections made                                     | Screw motors run                                |  |
| Safety flaps tightened (combi)                                  | Do pellets fall into the combustion chamber?    |  |
| Induced draught blower runs                                     | Ignition performed                              |  |
| Stove was switched off when handed over                         |   |  |

### **Operator instruction**

| Stove function         | Warranty terms                   |  |
|------------------------|----------------------------------|--|
| Control                | Cleaning                         |  |
| Operating instructions | Cleaning or maintenance interval |  |



work performed correctly according to order placed

Technican:

Operator

Client

Company:\_

# 16. GUARANTEE

These warranty conditions are only valid for the following countries: Austria, Germany and Switzerland. Separate conditions imposed by the importer apply for all other countries.

For the purpose of timely damage limitation, the warranty claim on the part of the claimant is to be enforced at the RIKA dealer in writing using the invoice and stating the purchase date, model name, serial number and reason for complaint.

### WARRANTY

5 years on the welded stove body. This exclusively applies to defects in materials and workmanship as well as free replacement. Labour and travel times are not included in the manufacturer's warranty.

Only original parts supplied by the manufacturer should be used. Loss of warranty on non-observance!

The precondition for the warranty is that the stove has been installed and commissioned properly according to the User and installation manuals valid at the time of purchase. Connection must be performed by a specialist for such stoves.

Any costs incurred by the manufacturer due to unjustified warranty claims are to be charged to the claimant.

Wear parts and parts affected by fire are excluded, such as glass, coating, surface coatings (e.g. handles, panels), seals, fire trough, grates, draught plates, deflector plates, combustion chamber liners (e.g. fireclay), ceramics, natural stone, thermo stone, ignition elements, sensors, combustion chamber sensors and temperature controller.

Damage arising from non-observance of the manufacturer's instructions for operation of the unit or any damage that is caused by action such as overheating, use of non-approved fuels, tampering with the device or the flue gas pipe, electrical excess voltage, an incorrect, insufficient or excessive flue draught, condensation, non-performance or deficient maintenance and cleaning, non-observance of the relevant and applicable building regulations, incorrect operation by the user or third parties, transport and handling damage is also excluded.

### THE WARRANTY DOES NOT AFFECT THE STATUTORY WARRANTY PROVISIONS.

01.07.2013



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RIKA Innovative Ofentechnik GmbH 4563 Micheldorf/Austria, Müllerviertel 20 Telefon: +43 7582 686-41, Fax-DW: 43 E-Mail: verkauf@rika.at

