

Serial Nr.

GAMA - PO

Service, Installation and Maintenance Instructions Local Gas Heaters



Destination country:

| | | |
|-----------|--|--|
| SK | | |
|-----------|--|--|

Certificate of Guarantee included

General advice:

- The instructions are valid just in the case when the country code placed on the gas heater is the same than the code placed on the front page. If the heater has got no code fixed on, follow technical instructions containing important information relating the version of the heater taking conditions of their usage in the relevant country into account.

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Thank you for your thrust and buying the **GAMA-PO*** gas heater. We believe that you will be satisfied with the product.

Description of the Heater

GAMA-PO gas heaters are designed especially to heat houses, cottages, flats, small buildings as well as industrial plants. Heaters are equipped with burners WORGAS of very high quality assuring good and ecological combustion of high-grade fuel. The burner is of high efficiency and producing small amount of emissions. It is controlled with a gas valve EUROSIT 630. In case of flame loosing the gas inlet is safely closed with a thermal control. Adjusted power output and ambient temperature rates are controlled with EUROSIT 630. The heat exchanger is made by special aluminium technology what assures very good thermal diffusivity and long life. The heater's cover is made of steel to increase strength of the product. It is guarded with ecologically safe surface finishing.

Specifications:

| Type: | | GAMA-PO 2.4 | GAMA-PO 3.4 | GAMA-PO 4.7 | GAMA-PO 2.4 | GAMA-PO 3.4 | GAMA-PO 4.7 | |
|---|-------------------|------------------------|------------------------|------------------------|-------------------------------|-------------------------------|-------------------------------|-----------|
| Version: | | B chimney | B chimney | B chimney | C through wall | C through wall | C through wall | |
| Fuel: | | ZP/PB G20/G30 | ZP/PB G20/G30 | ZP/PB G20/G30 | ZP/PB G20/G30 | ZP/PB G20/G30 | ZP/PB G20/G30 | |
| Rated power output | kW | 2,4 | 3,4 | 4,7 | 2,4 | 3,4 | 4,7 | |
| Consumption at rated power output | m ³ /h | 0,22/0,06 | 0,32/0,09 | 0,43/0,13 | 0,22/0,06 | 0,32/0,09 | 0,43/0,13 | |
| Heater inlet pressure of gas | mbar | 20/29 | 20/29 | 20/29 | 20/29 | 20/29 | 20/29 | |
| Max adjusted pressure of SIT controller | mbar | 15/28 | 15/28 | 15/28 | 15/28 | 15/28 | 15/28 | |
| Min adjusted pressure of SIT controller | mbar | 4/8 | 4/8 | 4/8 | 4/8 | 4/8 | 4/8 | |
| Piping coupling | DN | 15 | 15 | 15 | 15 | 15 | 15 | |
| Jet boring | main burner | mm | 1,3/0,8 | 1,5/0,95 | 1,75/1,1 | 1,3/0,8 | 1,5/0,95 | 1,75/1,1 |
| | switch. burner | mm | 0,35/0,25 | 0,35/0,25 | 0,35/0,25 | 0,35/0,25 | 0,35/0,25 | 0,35/0,25 |
| Appliance class | | II _{2H3B/P} | II _{2H3B/P} | II _{2H3B/P} | II _{2H3B/P} | II _{2H3B/P} | II _{2H3B/P} | |
| NO _x class | | 4 | 5 | 2 | 4 | 4 | 2 | |
| Efficiency class | | 1 | 1 | 1 | 1 | 1 | 1 | |
| Net weighth (cca) | kg | 12,5 | 17 | 18 | 12,5 | 17 | 18 | |

Note: Data behind the dash correspond with parameters related with propane-butane.

The manufacturer declares that “heating surface” means unfold surface of gas heater’s combustion chamber.

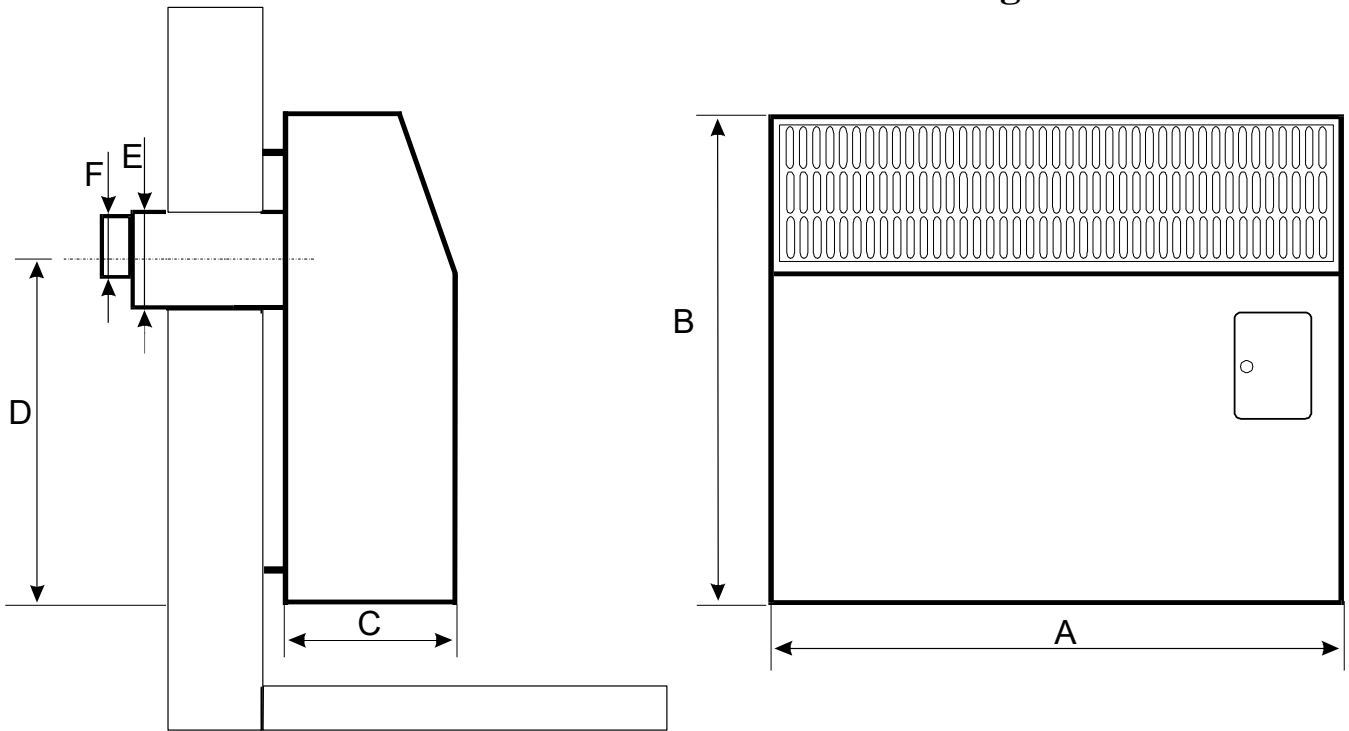
Accessories

1. The heaters are delivered with coaxial piping for emissions outlet and air inlet needed for burning. The piping length is 600 mm. (Standard emissions outlet can be prolonged to reach the total length of 1100mm.)
2. A basket to avoid direct wind attacks mounted onto the piping.

In case of the chimney version an emission draught interrupters and mounting consoles are delivered.

*PO – gas heater

Dimensional and Installation Drawing



Maximum length of emissions outlet is **1100 mm**.
 Clearance to incombustible wall is **25-30 mm**

| | GAMA-PO 4.7 B, C | GAMA-PO 3.4 B, C | GAMA-PO 2.4 B, C |
|---|-----------------------------------|-----------------------------------|-----------------------------------|
| A | 670 | 570 | 425 |
| B | 580 | 580 | 580 |
| C | 200 | 200 | 200 |
| D | 385 | 385 | 385 |
| E | Ø120 | Ø120 | Ø120 |
| F | Ø70 | Ø70 | Ø70 |

How to Use

Location and Installation

Before the gas heater is installed, check whether the local conditions of natural gas deliveries (with inlet pressure of 20 mbar) and gas heater's adjustment are compatible.

The gas heaters can be installed by authorised staff only.

Location and installation are to be performed in accordance with STN EN 1775, TPP 704 01, STN 38 6460, STN 06 1008, STN 33 2135 Standards.

While installing and using the gas heaters it is required to meet STN 06 1008 Standard, Art. 21, especially:

- the gas heaters are to be serviced according to Service instructions,
- the gas heaters can be operated by adult people only,
- the gas heaters can be safely use in the normal environment according to STN 33 0300 Standard.

In any condition leading to danger of temporary rising of flammable gases and vapours, or during works when could temporary danger of fire or explosion rise (e.g. during pasting of lino, PVC etc.), the gas heater has to be in time, before rising of the danger, put out of operation.

- the user has to be approved by the gas authority to connect the gas heater to a service pipe before mounting of the heater.
- the gas heater is necessary to locate standing or hang firmly on the non-inflammable heavy base, exceeding gas heater's lay-out at least by **100 mm** on all sides.
- do not put or place any inflammable things (e.g. curtains, shelves, sills, etc.) on the heater or near than 100 mm from it.
- the heater is to be placed over a non-inflammable floor in safety distance.
- in case of a special danger existing in kindergartens to save small children, or old or ill persons, it is recommended to use safety cover (not a part of the delivery)

It is strongly forbidden to remove the heater's cover and to touch the heat exchanger during operation!

Related standards:

STN 920 300 -Požiarna bezpečnosť lokálnych spotrebičov a zdrojov tepla.

STN 061 401 -Zabezpečovacie zariadenia pre ústredné vykurovanie a ohrievanie úžitkovej vody.

STN 38 6413 -Plynovody a prípojky s nízkym a stredným tlakom .

STN EN 1775 -Zásobovanie plynom

STN 734 201 -Navrhovanie komínov a dymovodov.

STN 734 210 -Montáž komínov a dymovodov a pripojenie a pripájanie spotrebičov palív.

TPP 704 01 -Domové plynovody

Service Instructions

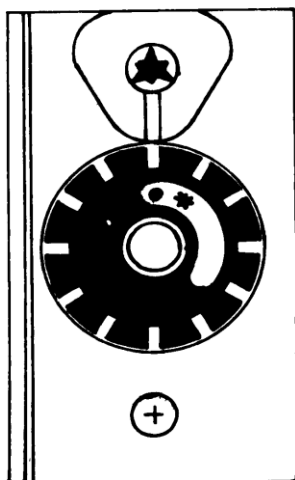


Fig.1

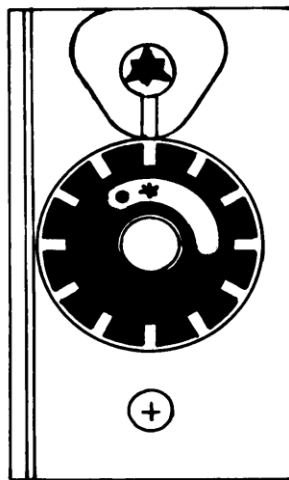


Fig.2

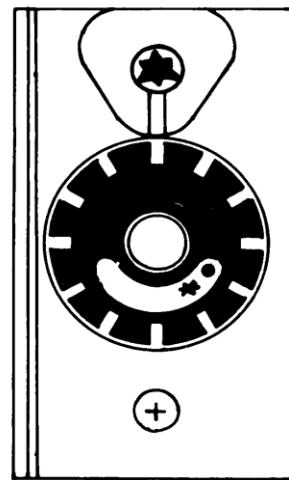


Fig.3

- Open the main gas shut-off placed beyond the heater.
- See Fig.1 – the regulating button is in the position “closed”.
- Turn the regulating button from the position “closed” to the position “star” (see Fig.2).
- Press the regulating button against the stop what puts gas into the switching small burner and hold it in this position for about 20 seconds.
- Then press the piezo gas lighter what burns the small flame on the switching burner (check through the inspection window).
- Keep the regulating button pressed next 20 seconds.
- After loosening of the button the burner should burn.
- Turn the regulating button to the required level from 1 to 7 (Fig.3), the main burner is burnt.
- After the main burner is burnt never turn the regulating button to the maximum levels (levels 6 and 7. Wait ca 2-5min, until the heater is stabilised and than choose required power level.

ATTENTION!

If after loosing of the regulating button the switching burner pop out, repeat the whole cycle of lighting after 3 min.

Never and at no situation cover the heater !

Switching the heater off

- The heater is switched off turning the regulating button to the position “closed” (Fig.1).
- In case the burner is stopped working for a long time, close also the gas valve beyond the heater.

Maintenance and Service

The gas heater can have its cover removed and its heat exchanger cleaned to remove prospective dust by a vacuum cleaned or with a wet towel soaked in detergent. Do not use any diluents and aggressive dissolvents – the special surface finishing of the heat exchanger could be damaged.

Never clean warm exchanger !

Models with connecting hoses have to have the hoses changed after 5 years of operation to meet valid standards and regulations (can be arranged by authorised service firms).

In case of a chimney version check drought of the chimney body or its insert once a year.

All other service or maintenance works can be performed by authorised staff only.

It is recommended to perform a specialised service inspection after each heating season to prolong heater’s life and to arrange its safety operation.

Any malfunction should be announced to a corresponding service firm. While performing a guarantee repair the serviceman has to present to the user his certificate authorising him to perform such repairs.

Installation Procedure

(For installation firms – can be performed by an authorised person only)

1. Put a mounting sheet next to the wall and mark the size of the sucking opening.
2. Sink the opening.
3. Seat the sucking piping descending into the heater (maximum gradient can be 5mm), render internal wall or fix it in the wall with an alternative insert.
4. Put the mounting sheet on, align it horizontally and mark the first opening for the anchor screw. Drill an opening of $\varnothing 6$. Put a combined screw into to fix the sheet. Mark another opening and repeat the procedure. Having drilled all four openings (always $\varnothing 6$) take the combined screws out and remove the mounting sheet. Enlarge the openings to $\varnothing 12$. Insert enclosed fasteners. Screw the anchor combined screws into the fasteners. Use the both enclosed nuts to screw the screws. Put them onto the metric part of the screw thread and lock them contrary.
5. Plug the mounting sheet onto the sucking piping (already fixed in the wall) and combine screws with one left nut. Align the sheet to have it parallel with the wall. **The sheet has not to touch the wall. Distance between the wall and the sheet should be 25 – 30 mm. The distance is to be set as a stop end on the screw by a nut.**
6. **Mark the length of the sucking piping.** Please note that the tube has to exceed the mounting sheet by about 1 mm even after being shortened. Remove the mounting sheet. Detach the not required part of the sucking piping.
7. Put the mounting sheet against the stop ends (the nuts – if you have followed the instructions the correct position of the sheet against the wall and the sucking piping is still set by the nuts). Use the second nut to tighten the mounting sheet. The overlapping part of the sucking piping (1mm – § 6) is to be bent using the metal part of a screwdriver along the whole circumference of the tube in the direction out of the centre. This way the piping is fixed in the mounting sheet, and its unfavourable loosening is avoided.
8. Unscrew the upper and lower (placed on the mounting sheet) holders of the exchanger's body. Insert the exchanger's body into the sheet and tighten it by the holders.
9. Insert the exhaust piping. If needed shorten its length to exceed the sucking piping by 25-30 mm. **It is important to mark (and then to shorten) the length having the tube sat on the whole exhaust's throat in the exchanger's chamber and also kept the overlapping of the exhaust over the sucking piping (see the enclosed drawing).** Fix its position with a longer screw placed in the sucking piping flange.
10. Put the basket on and fix it with screws.
11. Prepare a service line for the heater (DN 15). Connect the heater with a hose (a part of delivery) with a coupling of the ball valve (DN 15).
12. Put the heater's cover on.

The heaters of the chimney type B has to have an emission draught interrupter installed – see the drawing in the enclosure for the way of fixing of the heater.

Starting of Operation

(For service technicians - read carefully)

Check whether the main shut-off valve is open before starting of operation.

Follow these steps to switch the heater on:

1. **Check whether the heater is installed correctly – it has not be installed next to the wall, i.e. the mounting sheet should be ca 25-30 mm distanced from the wall (not valid for the chimney version)! Please take care for correct embedding of the emission piping. The exhaust pipe is to be fixed to the sucking piping by a screw, to overlap it min. by 25mm, to be fast put on the heater's exhaust throat (see dimensional and location drawing in the enclosure).**
2. Check pressure on the small burner's jet; adjust it with the adjusting screw to have the burning flame height of ca 30mm. Arrange also immersing of the thermel into the flame (ca 3mm).

3. Close the gas inlet to check the thermal control. In 1 min. you have to hear a noise signalling that the gas feeding of the main burner was stopped.
 4. Turn the regulating button of the automatic unit, the heater is switched on to minimum power output of the burner adjustable with U- type gauge and the screw on the unit to 40mm of water column (4mbar).
 5. Turn the regulating button maximally to reach the maximum power output. Adjust it with U-type gauge to 150mm of water column (15mbar). (Note: At high temperature in the room of ca 25-30 °C it is necessary to cool the thermal system of the automatic unit to achieve correct adjustment of maximum power output.
 6. Check tightness of junctions in the heater and of the gas valve during operation and adjustment. Starting of operation includes also checking of exhaust and placement of the sucking basket. The sucking piping has to be shorter than exhaust piping by min. 20-30 mm.
 7. Fix the temperature senser of the thermal system between the wall and the mounting sheet using plastic clamps put into the pre-drilled openings in the mounting sheet. Warm the thermal system to check its functioning.
 8. Fill the Guarantee Certificate carefully, let the customer to sign the affirmation that we was informed about operating of the heater.
- Now the heater is able to operate safely and reliably.

Rules for starting of operation in case of propane-butane version

Change the main burner and small burner jets.

| PB | GAMA-PO 2.4 | GAMA-PO 3.4 | GAMA-PO 4.7 |
|---------------------|--------------------|--------------------|--------------------|
| Main burner | 0,8 | 0,95 | 1,1 |
| Small burner | 0,25 | 0,25 | 0,25 |

In § 4. about starting of operation **change** the text:

... adjust with U-gauge to **80 mm** of water column (**8mbar**) with a screw on the automatic unit.

In § 5. about starting of operation **change** the text:

... adjust with U-gauge to **280 mm** of water column (**28mbar**)...

*Employees of PLYNOSPOL s.r.o. Prešov
wish you a lot of pleasant hours in your warm homes*

Guarantee Conditions and Quality and Integrity Certificate
Local Gas Heater GAMA-PO

Manufacturer: **PLYNOSPOL spol. s r.o.**
Masarykova 23
080 01 Prešov
tel. 051/ 7734109, fax 051/ 7725386
plynospol@plynospol.sk

Type: **GAMA-PO**

Serial Number:

Date of
Production:

Accessories: - coaxial piping for emission exhaust (type B mounting consoles)
- a basket and basket's flange (type B emission drought interrupter)
- a set of screws

GAMA-PO 4.7, 3.4, 2.4 (B,C)

CERTIFICATE Nr. 01338/104/2/2003

Drawn by Slovenský technický skúšobný ústav Piešťany (Slovak Technical Test Authority)

.....
Signature and stamp of OTK:

Guarantee conditions valid for Slovak Republic

The manufacturer guarantees that the quality of the heater corresponds with the latest technologies and materials.

1. The guarantee period for gas heaters is **24 months**. The guarantee period starts starting its operation, at least 6 months since the sale date, provided that the products are kept in dry tempered indoor area with avoided effects of any aggressive or flammable materials.
2. The guarantee repair can be accepted if the failure is without any needless delays notified to a service centre. If requiring the guarantee repair it is needed to present the filled original Certificate of Guarantee.
3. During the guarantee period all material damages and product failures will be eliminated. The manufacturer reserves the right to decide about changing or repairing of the fault part during the guarantee period. Changed parts remain a property of the manufacturer.
4. The guarantee repair can be accepted if the product was installed according to the valid standards and regulations by an authorised firm and put into operation by a trained service technician.

The service technician is compulsory to present a valid qualification to put the gas heaters **GAMA-PO** to operation.

The guarantee repair cannot be accepted if the product was not operated in accordance with the Service and Maintenance Instructions, if the heater has been damaged by the user or by unprofessional impact of a third person, using unsuitable chemical detergents for cleaning the heater, using spare parts of another production, if it was damaged during its transport after the heater is received from the manufacturer, or by force major.

The guarantee does not cover failures caused by impurities in gas, burned air, unsuitable exhaust, unsuitable location etc.

5. Having applied a requirement for a guarantee repair, the guarantee period is not prolonged and any new period does not come into being.
6. A change of the product or an relevant charge deduction can be acceptable only in case when the manufacturer is not able in the guarantee period to eliminate the failure or he decides this way.
7. Responsibilities for damages arising outside of the product are unacceptable, if not stated else in the law.
8. Starting of operation, adjustment, testing, all under- and after-guarantee repairs can be performed only by service firms authorised for servicing of **GAMA-PO**.

Filled Acknowledgement Send to PLYNOSPOL s.r.o.

A Duty of the User of the Heater!

Acknowledgement about installation and starting of operation of the heater

(Filled legibly by a qualified person with block letters!)

Gas Heaters **GAMA-PO 2.4 3.4 4.7** Serial Nr.

| | |
|---|---------------------------------------|
| The manufacturer declares that the heater was correctly checked and its execution corresponds with technical conditions and STN | Sign and Stamp of Quality Department: |
|---|---------------------------------------|

The supplier declares that the gas heater corresponds with the standard: STN EN 613:2003

| | |
|----------------------------------|-------------------------------------|
| Sale Date (state month by word): | Stamp and Sign of the Sales Person: |
|----------------------------------|-------------------------------------|

Important:

| | |
|---|--------------------------------------|
| Date of Installation (state month by word): | Stamp and Sign of Installation Firm: |
|---|--------------------------------------|

Records about Starting of Operation

| | | |
|------------------|----------|-------|
| Name of the user | Address: | Town: |
|------------------|----------|-------|

| | |
|---------------|---|
| Service Firm: | Attended by – Name of the service technician (legibly): |
|---------------|---|

Hereby I confirm that after inspection of all required matters the heater is able to function permanently. The user was informed about servicing and regular maintenance of the heater.

| | |
|---|--|
| Hereby I declare that the heater was put into operation and I was informed about its servicing. | Date of starting of operation (month by word): |
| | Stamp and sign of the service person: |
| Sign of the user: | |

Certificate of Guarantee

Acknowledgement about installation and starting of operation of the heater (Filled legibly by a qualified person *with block letters!*)

Gas Heaters **GAMA-PO 2.4 3.4 4.7** Serial Nr.

| | |
|---|---------------------------------------|
| The manufacturer declares that the heater was correctly checked and its execution corresponds with technical conditions and STN | Sign and Stamp of Quality Department: |
|---|---------------------------------------|

The supplier declares that the gas heater corresponds with the standard: STN EN 613:2003

| | |
|----------------------------------|------------------------------------|
| Sale Date (state month by word): | Stamp and Sign of the Sales Person |
|----------------------------------|------------------------------------|

Important:

| | |
|---|--------------------------------------|
| Date of Installation (state month by word): | Stamp and Sign of Installation Firm: |
|---|--------------------------------------|

Records about Starting of Operation

| | | |
|------------------|----------|-------|
| Name of the user | Address: | Town: |
| | | |

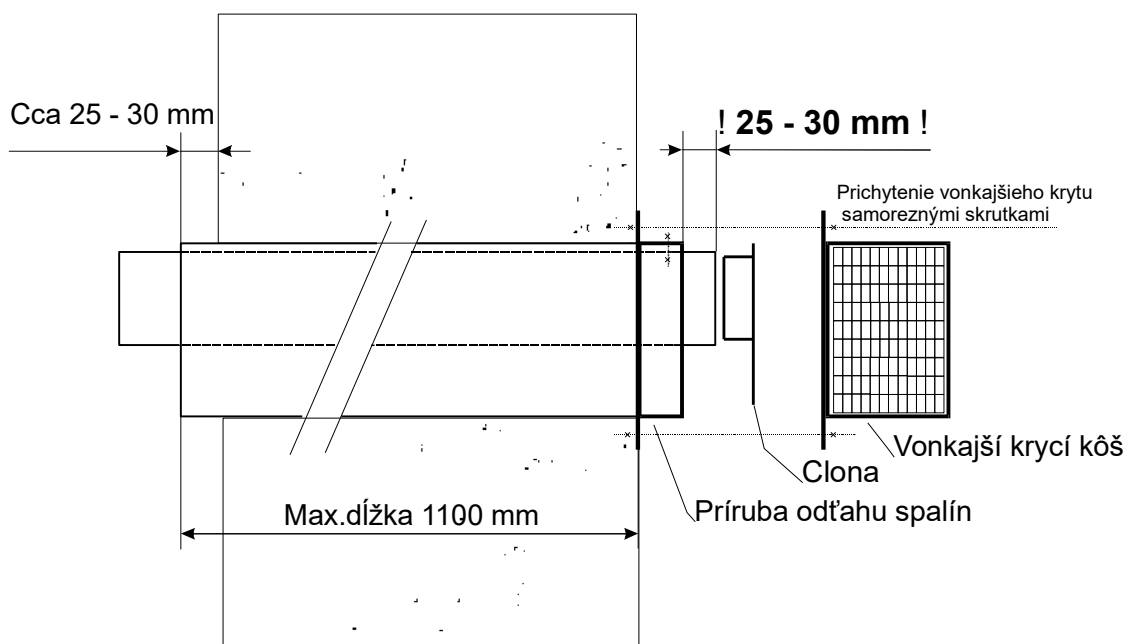
| | |
|---------------|---|
| Service Firm: | Attended by – Name of the service technician (legibly): |
| | |

Hereby I confirm that after inspection of all required matters the heater is able to function permanently. The user was informed about servicing and regular maintenance of the heater.

| | |
|---|--|
| Hereby I declare that the heater was put into operation and I was informed about its servicing. | Date of starting of operation (month by word): |
| | Stamp and sign of the service person: |
| Sign of the user: | |

Enclosure:

Installation of blower



Prich..... – Fixing of the cover with thread-cutting screws

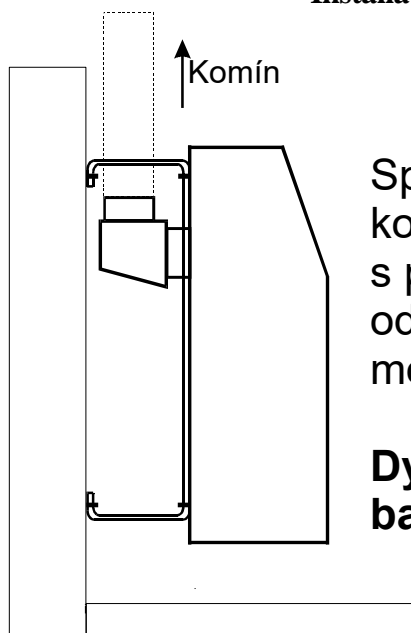
Vonkaj... – External covering cage

Clona ... – Stop (blanket)

Príruba.. – Waste gases exhaust flange

Max..... – Maximum length 1100mm

Installation of the Chimney Type (version B)



Spotřebiče v prevedení do komína (trieda B) sa montujú s použitím prerušovača odťahu spalín na priložené montážne konzoly.

Dymovod nie je súčasťou balenia

Appliances of the version with the outlet into a chimney (version B) are to be installed with a emission exhaust interrupter placed onto the enclosed installation consoles.

A flue gas ducting is not o part of the product.