# **Blokhus**

40011609-1601 Blokhus ENG



### Installation Instructions







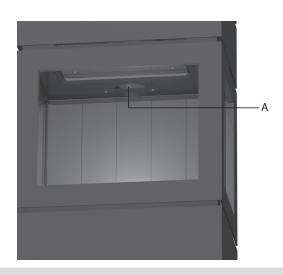
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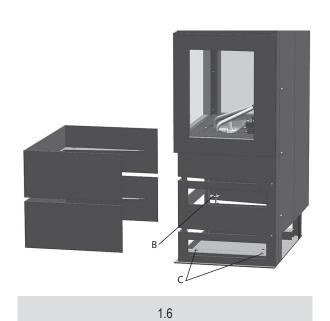
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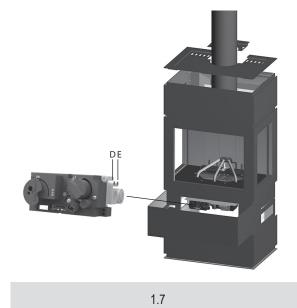


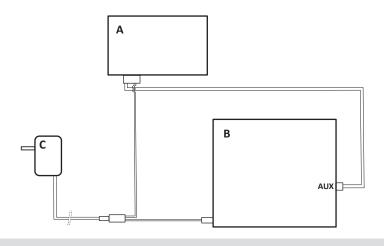
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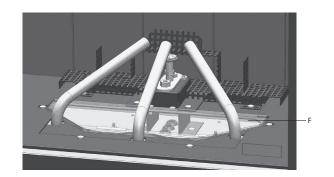






1.8





1.9





2.1

### 1 Dear customer

Congratulations on purchasing your Faber fire a quality product, which provide you with warmth and atmosphere for many years. Please read the user manual before using the fire. Should, despite the careful final checks, a malfunction occur, please contact your Faber dealer.

> Please note: The data of your fire is available in the user manual

### 1.1 Introduction

Only have the appliance installed by a qualified installer according to the gas safety regulations.

Read this installation manual properly.

### 1.2 Please check

Check the fire for transport damage and report any damage immediately to your dealer.

### 1.3 CE Declaration

Glen Dimplex Benelux certifies that this Faber fire complies with the essential requirements of the gas appliances directive.

Product: gas room heater Model: Blokhus

Applicable EC directives: 2009/142/EC Harmonised standards applied: NEN-EN-613

NEN-EN-613/A1

This Declaration is invalid, if without the written permission of Glen Dimplex Benelux:

- Changes are made to the appliance.
- The fire is connected to other exhaust materials than specified.

# 2 Safety instructions

- The unit must be installed and checked every year by a qualified engineer according to these instructions and the applicable national and local regulations.
- Ensure that the data on the type label matches the local gas type and pressure.
- The settings and the construction of the fire must not be changed!
- Do not place extra imitation wood or other smouldering material on the burner or in the combustion chamber.
- The unit is for atmosphere and heating purposes. This means that all surfaces, including the glass, can be very hot (over 100°C); exceptions to this are the bottom of the fire and the control surfaces.
- Do not place any combustible materials within 0.5 m of the radiation area of the fire.
- Light the fire for the first time and run for several hours on the highest setting, so that the paint can cure. Provide adequate ventilation, so that any fumes can disperse; we recommend vacating the room during this process
  - > Please note. Through the natural air circulation of the fire moisture and uncured volatile components from paint, building materials and carpeted floors, etc. are attracted. These parts can settle as soot on cold surfaces. Therefore do not light the fire shortly after installation.

# 3 Installation requirements

# 3.1 Minimum distances to combustible materials around the fire

- Keep a minimum distance of 20 millimetres to the back wall and 500 millimetres at the sides.
- When using the extension module keep a minimum distance of 250 millimetres to the ceiling.

### 3.2 Fluepipe and terminal requirements

- For the supply of the combustion air and the discharge of the combustion gases you should always use the Flue materials specified by Faber.
  - > Please note: Only when using these materials can Faber guarantee the safe and proper operation of the appliance.
- The outside of the concentric flue material can heat up to +/-150°C. Ensure, when penetrating a flammable wall or ceiling, construction with proper insulation and protection. Ensure sufficient clearance is maintained.
- Ensure that the concentric flue pipes are supported every meter, so that the weight of the pipes is not supported by the fire.
- It is not permitted to start directly on the device with concentric cut down pipe material.
   The air supply could then possibly be closed.

### 3.3 Terminals

The combined supply and discharge can be done both via wall or through the roof or through an existing chimney.

> Please note: Verify if the position of the terminal meets the local regulations regarding ventilation openings. For proper functioning, the air supply and combustion gas discharge are not to be obstructed. The minimum distances are specified in Chapter 15.

### 3.3.1 C11, Wall terminal.

For a facade or wall outlet use a wall terminal. (Fig. 2.2 C11)

### 3.3.2 C31, Roof terminal.

For a flat or pitched roof outlet use a long roof outlet (Fig. 2.2 C31)

### 3.3.3 C91, Existing chimney.

For an existing chimney use the short chimney outlet with a diameter of 100/150mm (Fig.2.2] C91).

In this case the existing chimney acts as air inlet an inserted flexible stainless steel pipe discharges the flue gas. The top and the bottom should be airtight.

Depending on the calculated outlet diameter, use a flexible stainless steel tube of Ø 100mm with CE marking for 600°C.

> Please note: The minimum chimney diameter for a 100mm flexible stainless steel pipe is 150x150mm.

# 4 Preparation and installation instructions

### 4.1 Gas connection

The gas connection must comply with the applicable local standards.

We advise using a  $\emptyset$  15mm gas connection directly from the gas meter to the appliance, with a shut-off valve in the proximity of the appliance, which must always be freely accessible.

Position the gas connection so that it is easily accessible at all times for service, and that the burner unit can be disassembled.

### 4.2 Electrical connection

The power supply must comply with the applicable local standards.

A wall socket 230VAC/50Hz must be installed near the fire.

For power supply make use of the included plug adapter. See fig 1.8 for the wiring diagram of this connection and the LED Symbio module.

A = LED Symbio module

B = receiver/control unit

C = plug adapter

### 4.3 Preparing the fire

- Remove the fire from its packaging.
- To do this unscrew the nut and bolt in the bottom plate
- Remove frame and glass (see Chapter 5) and take the packaged parts from the fire.
- Store frame and glass in a safe place.
- The included wall bracket (fig 1.9) is only for use with the optional extension modules.

See chapter 18 until 20 for the instructions of this extension modules.

- Prepare the gas connection on the regulator
- When necessary the upper and the lower panels can be removed.

Therefore loosen the 2 bolts on the inside left and right, lift the panel a little. The panel can be moved forward now. (fig 1.6 B)

The middle panel is loose, for access to the gas control.

### 4.4 Positioning the fire

- Take the installation requirements into account (see Chapter 3).
- The fire can be levelled with the 4 adjustable feet in the bottom plate ( fig 1.6 C) and by use of a hex wrench #5.

### 4.5 Installing the Flue materials

- For fitting the flue pipe on the fire the top plates can be removed. (fig 1.7)
- When penetrating a wall or ceiling the opening must be at least 5mm larger than the diameter of the flue pipe.
- Horizontal sections should be installed with a slope towards the fire (3 degrees).
- Build the system upwards from the fire. If this is not possible you can make use of an extendable adapter section.
- For truing up the exhaust system use the ½ meter pipe, which can be shortened and ensure that the inner pipe is always 2cm longer than the outer pipe.

- Any parts which can be shortened must be secured with a self-tapping screw
- Wall and roof terminals can also be cut to length.
- Do not insulate but ventilate any built-in flue pipes. (approx. 100cm2).
- · options:

For the installation instructions of the optional to order extension modules in combination with the flue pipes see Chapter 18 till 20 and for the HE module, see Chapter 21. NOTE: Only 1 HE module may be used.

# 5 Removing the glass

- Remove the window frame, push up and pull the bottom forward. (Fig 1.1 and 1.2)
- Remove all glass clamps and remove the glass.
   (Fig 1.3 and 1.4)
- Placing the glass goes in reverse order

> Note: Remove the fingerprints from the glass these will burn in and cannot be removed after the fire is used

# 6 Placing the decorative material

It is not allowed to add different or more materials to the combustion chamber.

Always keep the pilot burner free from decorative material!

### 6.1 Placing the imitation logs

- Place the glass panel (Fig 2.0 F) on the bottom in the gaps left and right.
- Spread the glass fragments over the glass panel (one layer) and cover these with part of the vermiculite supplied (the amount of vermiculite affects the intensity of the glow effect and can be done according to your own discretion)
- Place the imitation logs. Make sure that the logs are properly connected to the tube burners and rest on the bottom of the fire.
  - If necessary remove glass fragments and/or vermiculite underneath the burners. (see fig. 2.1 or the supplied instruction card).
- Spread the rest of the vermiculite and the chips over the bottom of the burning chamber. Ensure that the air openings are not covered.

Start the fire as described in the user manual. Check the appearance of the flames and for burning against the vermiculite.

# 7 Checking the installation

7.1 Checking the ignition of the pilot burner and main burner

Light the fire as described in the user manual.

- Check that the pilot flame is not covered by chips and/or an imitation log.
- Check the ignition of the main burner on full and low setting. (ignition must be smooth and quiet).

### 7.2 Checking for gas leaks

Use a gas leak finder or spray to check all connections and pipes for gas leakage.

# 7.3 Checking the burner pressure and primary pressure

Check that the burner pressure and primary pressure match the information listed in the manual, Chapter 14 Technical specifications

Measuring the primary pressure:

- Close the shutoff valve.
- Turn measuring nipple D (Fig. 1.7) some turns open and connect a measuring hose to the gas regulator.
- Take this measurement at highest setting of the fire and when the fire is set to pilot light.
- Do not connect the unit if the pressure is too high.

Measuring the burner pressure:

- Check the burner pressure only with proper primary pressure.
- Turn measuring nipple E (Fig. 1.7) some turns open and connect a measuring hose to the gas regulator.
- The pressure must correspond to the value indicated in the technical specifications of this manual. In case of deviation contact the manufacturer.
  - > Please note: Close all pressure measuring nipples and check for gas leakage.

### 7.4 Checking the flame image

Let the fire burn for at least 20 minutes at highest setting and check the flame for:

- 1. Flame distribution
- Colour of the flames

If one or both points are not acceptable then check:

- The log set layout and/or the amount of chips on the burner.
- The pipe connections for leaks (in case of blue flames).
- · Whether the correct Restrictor is fitted.
- · The outlet.
  - Wall terminal right side up
  - Roof terminal on the right position
  - If the maximum horizontal flue lengths is not exceeded.

### 8 Instructions for client

- Recommend that the unit should be checked annually by a qualified specialist to ensure the safe use and to guarantee a long service life.
- Give advice and instructions on care and cleaning of the glass. Highlight the danger of burnt-in fingerprints.
- Instruct the customer on the operation of the unit and the remote control, setting the receiver.
- Handover to customer:
  - Installation instructions
  - User manual
  - Log set instruction card

# 9 Annual maintenance

### 9.1 Checking and cleaning:

- · Check and clean if necessary after verification:
  - The pilot light
  - The burners
  - The combustion chamber
  - The glass
  - The ceramic logs for breakages.
  - The flue system.
- Replace, if necessary:
  - Chips/vermiculite
  - Glass fragments

### 9.2 Cleaning the glass

Most deposits can be removed with a dry cloth. Clean the glass with a ceramic hob cleaner.

> Please note: Avoid fingerprints on the glass. These cannot be removed after they are burnt in!

Now carry out the checks described in Chapter 7 "Checking after installation".

# 10 Conversion to other gas type

The conversion to a different gas type may only be performed by a qualified installer/dealer.

# 10.1 Conversion from natural gas to propane (or vice versa)

This can only be done by replacing the burner. To do so, please contact your dealer.

Specify with your order always the type and serial number of the device.

# 11 Flue calculation

A simple way to calculate whether the exhaust configuration is possible in combination with your fire, use the free "Faber Flue App" and download from:

### INTERNET:

BlackBerry, Android, PC (with Google Chrome browser)

APP store:

iPhone, iPad and Mac.

Google Play:

Android smartphones and Android tablets.

Alternatively use the exhaust calculation sheet (see chapter 13). The alternatives of outlet lengths and any restrictors are set out in the restrictor table (see 11.1). In the table we work with Start Length (STL) Total Vertical Height (TVH) and Total Horizontal Length (THL).

### Start Length (STL)

This is the first part that is placed on the fire and represents a certain value (See chapter 12, fig.12.1, 12.2 and 12.3 A, N, F). This value is in the top row of the table.

### Total Vertical Height (TVH)

TVH is the difference in height measured from the top of the fire to the outlet; it can be measured or determined from the building plan. For clarification see the TVH indication in the drawings. (Fig. 12.1, 12.2 and 12.3)

### Total Horizontal Length (THL)

THL is the Total Horizontal Length and consists of elbows and pipes which are entirely in the horizontal plane. Elbows I, K and Q and the elements H, J, L, M, P and R (Fig. 12.2 and 12.3).

### · Horizontal length

The horizontal length consists of the elements H, J, L, M, P and R (Fig. 12.2 end 12.3).

- Elbows 90° in the horizontal plane Horizontal bends are bends which are entirely in the horizontal plane (Fig. 12.1, 12.2 and 12.3 I, K and Q).
- Bends 45° or 30° in the horizontal plane
   Horizontal bends are bends which are entirely in the horizontal plane
- Bends

Elbows 90° vertical to horizontal plane These are 90° elbows, which proceed from horizontal to vertical (Fig. 12.2 and 12.3 G, O and S)

- Bends 45° or 30 °vertical to horizontal plane These are 30° or 45° bends with a vertical offset of less than 45° (Fig.12.1 B and D).
- · Pipes under a tilt angle:

These are pipes which are vertically ascending at an angle of  $30^{\circ}$  or  $45^{\circ}$ . (Fig. 12.1 C). Fill in only in combination with at least 2 x 30 or  $45^{\circ}$  bends in the vertical part.

### Table

See the table at the right vertical (TVH) and horizontal length (THL).

For "x" and if the values are outside the table, then the combination is not allowed. Only then adjust the TVH or THL.

If a value is indicated, check that the calculated STL value is not lower than indicated in the table. In this case STL must be adjusted. The found value indicates the width of the restrictor ("0" means no restrictor). Standard is a restrictor of 30mm installed. (Fig.1.5).

### 11.1 Restrictor table without HE-module

Starting length (STL) Vertical (TVH) and Horizontal (THL)

STL	STL	02	0,5	1	1	1	1	1						1	
	TVH	0	1	2	3	4	5	6	7	8	9	10	THL	<b>←</b>	THL
	0	х	Х	Х	Х	Х	Х	Х	Х	х	Х	Х			
	0,5	Х	Х	Х	Х	Х	Х	Х	Х	х	Х	Х			
TVH	1	30	0	0	х	х	Х	Х	х	х	Х	Х			
	1,5	30	30	0	0	0	Х	Х	Х	Х	Х	Х			
	2	30	30	30	0	0	0	0	х	х	Х	Х			
	3	40	30	30	30	0	0	0	Х	х	Х	Х			
$\downarrow$	4	40	40	30	30	30	0	0	х	х	Х	Х			
v	5	50	40	40	30	30	30	0	х	х	Х	Х			
	6	50	50	40	40	30	30	30	х	х	Х	Х			
	7	60	50	50	40	40	30	30	х	х	Х	Х			
	8	60	60	50	50	40	30	0	Х	х	Х	Х			
	9	60	60	50	50	40	30	0	х	Х	Х	Х			
	10	65	60	50	50	40	30	0	х	х	Х	Х			
	11	65	60	50	40	30	0	0	х	Х	Х	Х			
	12	65	60	50	40	30	0	0	х	Х	Х	Х			
	13	65	60	50	40	30	0	0	Х	Х	Х	Х			
	14	65	60	50	40	30	0	0	х	х	Х	Х			
	15	65	60	50	40	30	0	0	х	х	Х	Х			
	16	65	60	50	40	30	0	0	Х	Х	Х	Х			
	17	65	60	50	40	30	0	0	х	х	Х	Х			
	18	65	60	50	40	30	0	0	х	х	Х	Х			
	19	65	60	50	40	30	0	0	х	х	Х	Х			
	20	65	60	50	40	30	0	0	х	х	Х	Х			
	21	65	60	50	40	30	0	0	х	х	Х	Х			
	22	65	60	50	40	30	0	0	х	х	Х	Х			
	23	65	60	50	40	30	0	0	х	х	Х	Х			
	24	65	60	50	40	30	0	0	х	х	Х	Х			
	25	65	60	50	40	30	0	х	х	х	Х	Х			
	26	65	60	50	40	30	Х	Х	Х	Х	Х	Х			
	27	65	60	50	40	Х	Х	Х	Х	Х	Х	Х			
	28	65	60	50	Х	Х	Х	Х	Х	Х	Х	Х			
	29	65	60	Х	Х	Х	Х	Х	Х	Х	Х	Х			
	30	65	Х	Х	Х	Х	Х	Х							

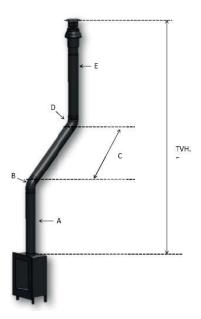
### 11.2 Restrictor table with HE-module

Starting length (STL), Vertical (TVH) en Horizontal (THL)

STL→	STL	1	1	1	1	1	1	1	1	1	1	1		
	TVH	0	1	2	3	4	5	6	7	8	9	10	THL	<u> TH</u> L
	0	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		
	0,5	Х	0	Х	Х	Х	Х	Х	Х	Х	Х	Х		
	1	30	0	0	Х	Х	Х	Х	Х	Х	Х	Х		
TVH	1,5	30	30	0	0	Х	Х	Х	Х	Х	Х	Х		
	2	40	30	30	0	0	0	Х	Х	Х	Х	Х		
	3	40	40	30	30	0	0	0	Х	Х	Х	Х		
↓	4	50	40	40	30	30	0	0	Х	Х	Х	Х		
	5	50	40	40	40	30	30	0	Х	Х	Х	Х		
	6	50	50	40	40	40	30	30	Х	Х	Х	Х		
	7	50	50	50	40	40	30	30	Х	Х	Х	Х		
	8	60	60	50	50	40	30	30	Х	Х	Х	Х		
	9	60	60	50	50	40	30	30	Х	Х	Х	Х		
	10	65	60	50	50	30	0	0	Х	Х	Х	Х		
	11	65	60	50	50	30	0	0	Х	Х	Х	Х		
	12	65	60	50	40	30	0	0	Х	Х	Х	Х		
	13	65	60	50	40	30	0	0	Х	Х	Х	Х		
	14	65	60	50	40	30	0	0	Х	Х	Х	Х		
	15	65	60	50	40	30	0	0	Х	Х	Х	Х		
	16	65	60	50	40	30	0	0	Х	Х	Х	Х		
	17	65	60	50	40	30	0	0	Х	Х	Х	Х		
	18	65	60	50	40	30	0	0	Х	Х	Х	Х		
	19	65	60	50	40	30	0	0	Х	Х	Х	Х		
	20	65	60	50	40	30	0	0	Х	Х	Х	Х		
	21	65	60	50	40	30	0	0	Х	Х	Х	Х		
	22	65	60	50	40	30	0	0	Х	Х	Х	Х		
	23	65	60	50	40	30	0	0	Х	Х	Х	Х		
	24	65	60	50	40	30	0	0	Х	Х	Х	Х		
	25	65	60	50	40	30	0	Х	Х	Х	Х	Х		
	26	65	60	50	40	30	Х	Х	Х	Х	Х	Х		
	27	65	60	50	40	Х	Х	Х	Х	Х	Х	Х		
	28	65	60	50	Х	Х	Х	Х	Х	Х	Х	Х		
	29	65	60	Х	Х	X	Х	Х	Х	Х	Х	Х		
	30	65	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		

# 12 Examples flue materials

fig. 12.1 fig.12.2



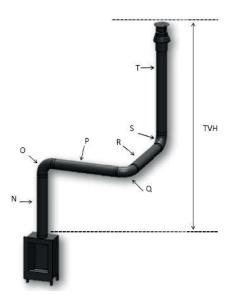
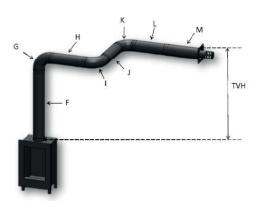


fig. 12.3



# 13 Calculation sheet

Starter length (STL)										
First p	art on top o	Value								
Flue le	ength from (	0,2								
Flue le	ength from (	0,5								
Flue	length from	1 1 m	till 1,4m	1						
	length from	1,5								
	lue length 2	2								
11										
	Bend		•	0,1						
	Bend 45°, 3			0,2						
	Roof ter	mina	<u> </u>	1						
	Wall ter	minal	l	0	Value					
	n		rounded value							
			meter		meter					
		T	otal Horizontal Length (THL	)						
		Cal	culation							
Part	number	х	value	result						
Total Length in meters		х	1							
90° Bend, vertical to		х	0,4							
horizontal 45° Bend, vertical to			3,1							
horizontal										
90° Bend in horizontal										
direction										
45° Bend in horizontal										
direction										
flue pipes at an angle in meters		rounded value								
in ineters			Total	+	meter					

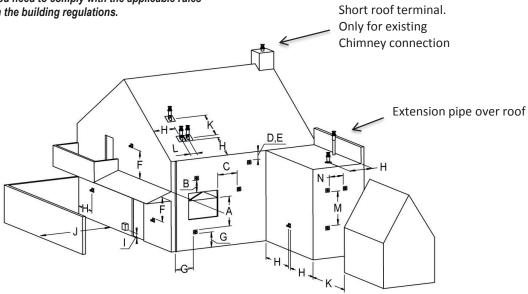
	found value								
Search in the table at TVH and THL and enter the value that is	found.								
If the detected value is a number, check whether the completed STL is higher or equal to the value in the table.									
Is the STL value lower as specified in the table then the installation is not possible. Solution: Start length to low, see for the minimum length in the top row of the table.									
Is the found value X, then the installation is not possible. Solution: Change the TVH or THL.									
Results									
Restrictor size = Value for the comma		mm							
Extra information = Value behind the comma		mark							
Install the air restrictor plate, see installation manual	0,1								
Install adapter 100/150 direct on top of the fire	0,2								
In case of wall terminal, install adapter 100/150 before the last bend, incase of roof terminal just before the terminal.	0,3								
In case of roof terminal (always size 100/150) install the 100/150 adapter just before the terminal.  Wall terminal 130/200	0,4								

# 14 Technical data

Gas category		II2H3+	II2H3+	II2H3+
Type appliance		C11/C31/C91	C11/C31/C91	C11/C31/C91
Reference gas		G20	G30	G31
Input	kW	6,5	6,5	6,5
Efficiency class without HE-module		2	2	2
Efficiency class with HE-module		1	1	1
NOx-class		5	5	5
Inlet pressure	mbar	20	30	37
Gas rate	m³/h	0,690	0,200	0,255
(at 15º C and 1013 mbar)	gr/h	-	500	480
Burner pressure at full mark	mbar	10	22	24,5
Injector main burner	mm	(3x) 1,50	(3x) 0,90	(3x) 0,90
Reduced input restraint	mm	1,6	0,85	0,85
Pilot flame		SIT160	SIT160	SIT160
Code pilot flame injector		Nr.51	Nr.30	Nr.30
Diameter outlet/inlet	mm	100/150	100/150	100/150
Gas controle valve		GV60	GV60	GV60
Gas connection		3/8"	3/8"	3/8"
Electrical connection	V	230	230	230
Batteries receiver	V	(4x) 1,5 AA	(4x) 1,5 AA	(4x) 1,5 AA
Batteries remote	V	(2x) 1,5 AAA	(2x) 1,5 AAA	(2x) 1,5 AAA

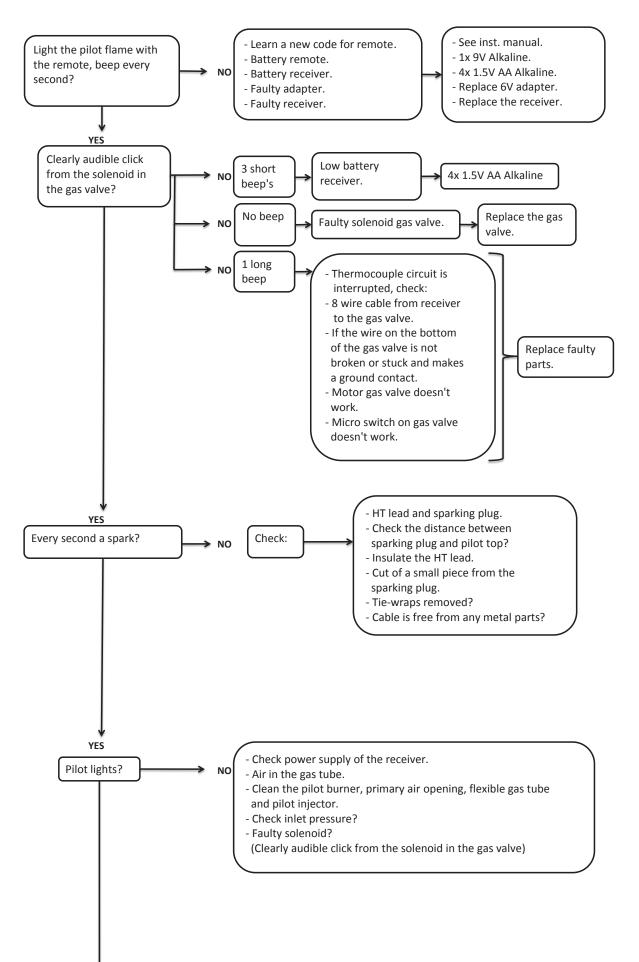
# 15 Terminal position

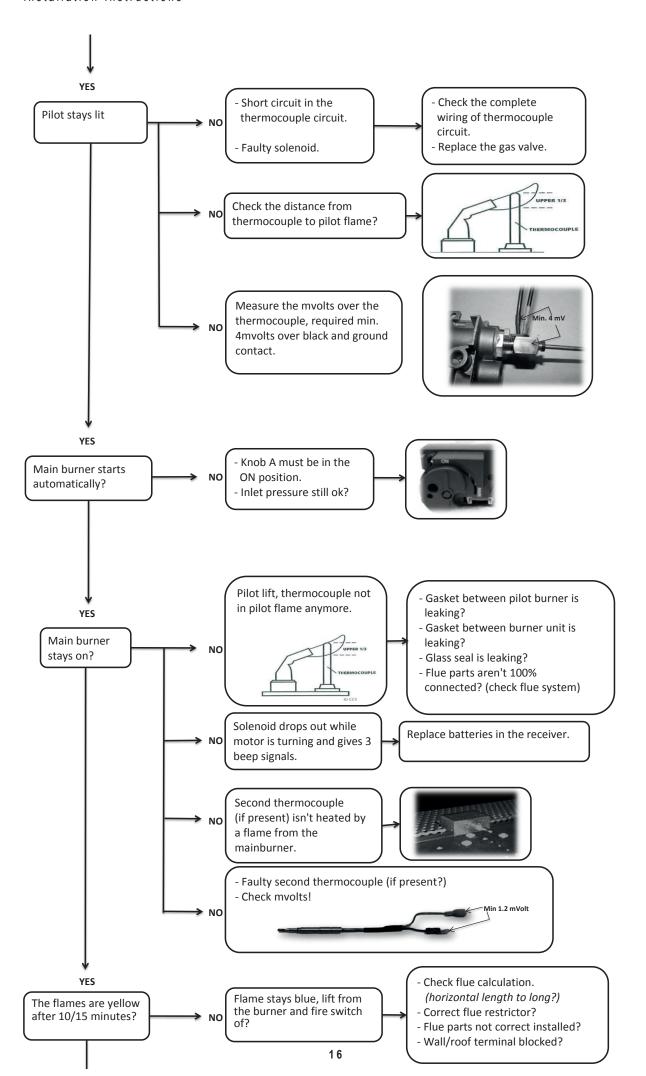
> Please note: These rules apply only for the proper functioning of the unit, for ventilation and environmental protection you need to comply with the applicable rules as defined in the building regulations.

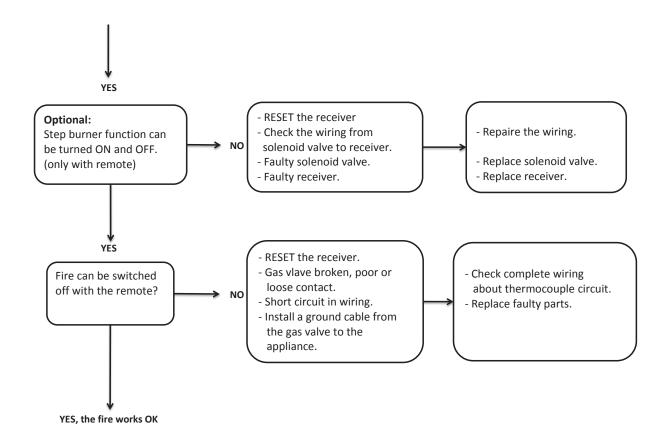


Location	Position outlet	Distance mm
D	Under a gutter	500
Е	Under a roof edge	500
F	Under a carport or balcony	500
G	Vertical downpipe	300
Н	Inside and outside corners	500
J	From wall surface to a wall outlet	1000
K	Two gable outlets against over each other	1000
L	Distance between two roof outlets	450
М	Two roof outlets above each other on a pitched roof	1000
N	Two gable outlets next to each other	1000

# 16 Troubleshooting guide



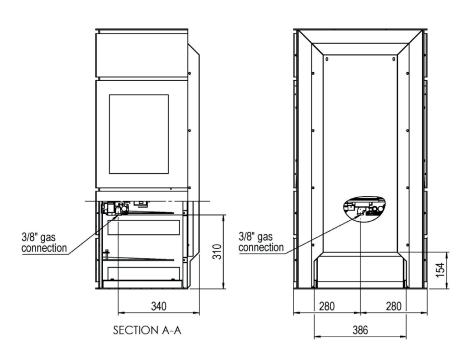




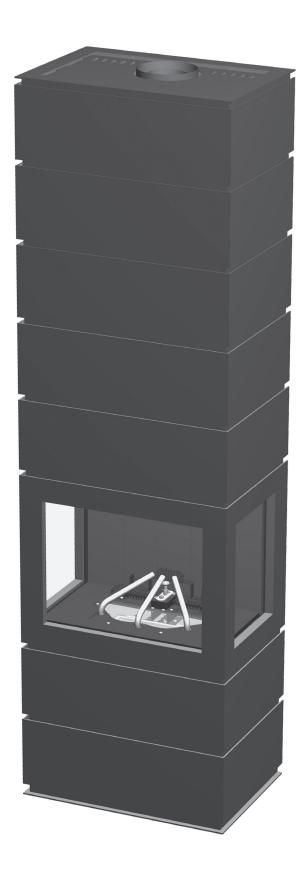
# 17 Dimensional drawings

# 17.1 Blokhus Ø 150 Ø 100

# 17.2 Position gas connection



# 18 Instruction extension Module(s)



# 19 Instructions

### 19.1 Requirements

- The distance to the ceiling must be at least 250mm.
- When a single module is used in combination with double module(s), the single must be installed on top.
- The back panel of the double module has cut outs which can be removed in case of a wall terminal or back outlet. (see dimensional drawings)
- The fire can be fitted to the wall by using the included wall bracket. (Photo 3)



### Fire:

• Remove the top plate and the rear inlay part. Replace these back on the top module after installation.

### Extension module(s):

### Preparation:

- · Remove the module(s) from its packaging.
- Loosen screws A on the inside (Photo 1) to remove the panels.
- If necessary the back panel(s) can be removed by loosening scews B (Photo 1).
- Remove the upper panel of the fire by loosening screws A.

### Montage:

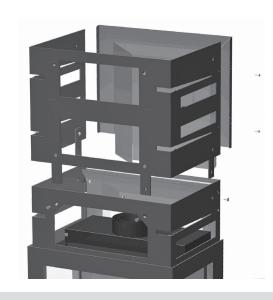
- Place and screw the first extension module on the fire with the included screws and nuts. (Photo 2)
- · Install the first flue part on the fire.
- If necessary fit the back panel with the screws **B**.
- Place the panels back and eventually lock these with the screws A.
- The other modules can be fitted in the same way.
- If necessary the complete fire can be fitted to the wall with the wall bracket. (Photo 3)

  The access for fiving on the fire are included, the access for fiving on the fire are included.

The screws for fixing on the fire are included, the screws for fixing on the wall not. (Is depending of the wall structure).



1



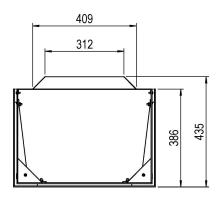
2

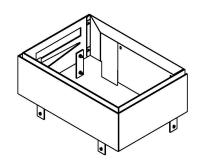


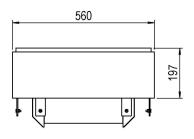
3

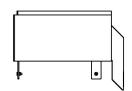
# 20 Dimensional drawings

# 20.1 Extension module single

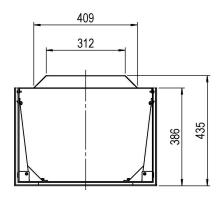






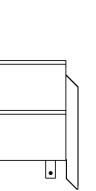


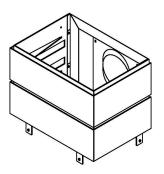
# 20.2 Extension module double

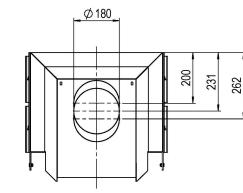


394

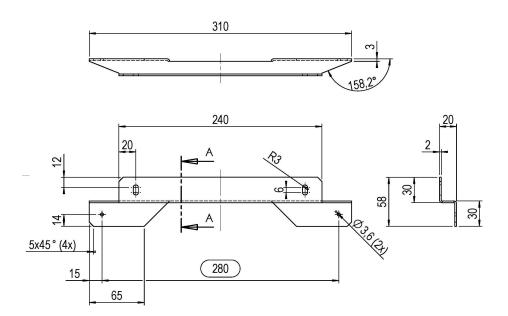
560



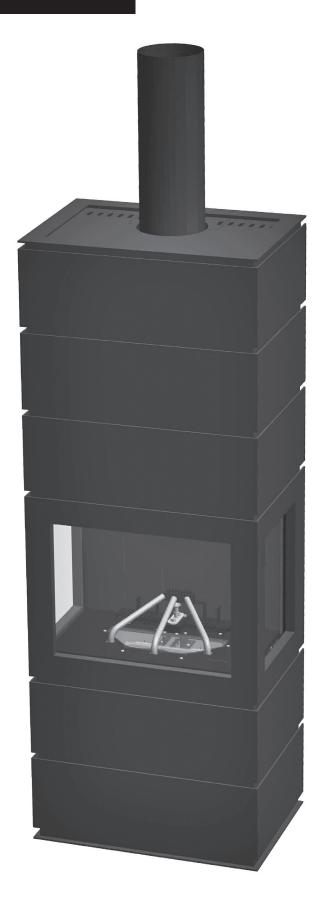




# 20.3 Wall bracket



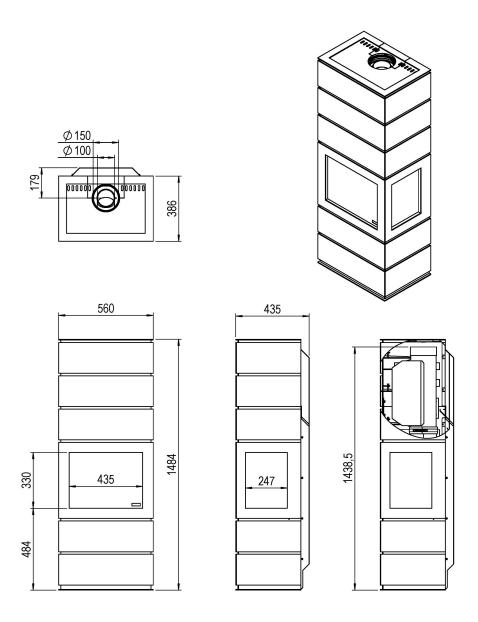
# 21 HE-module



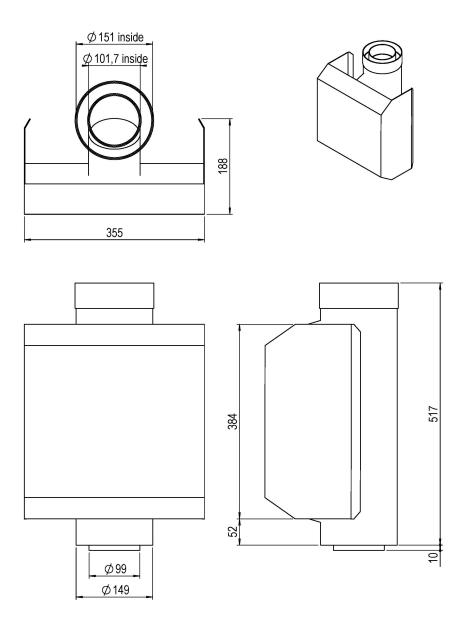
# 21.1 Assembly



### 21.2 Dimensional drawing Blokhus with HE-module



### 21.3 Dimensional drawing HE-module





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