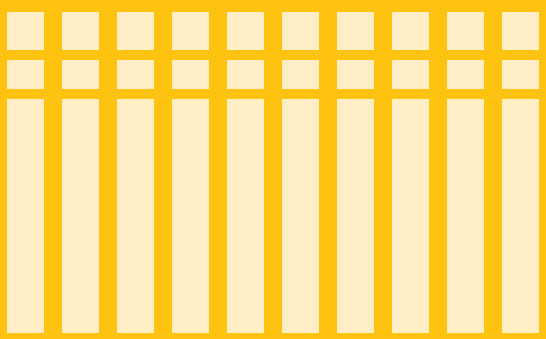
Lipovica®
HLINÍKOVÉ RADIÁTORY

Aludesign

KATALOG



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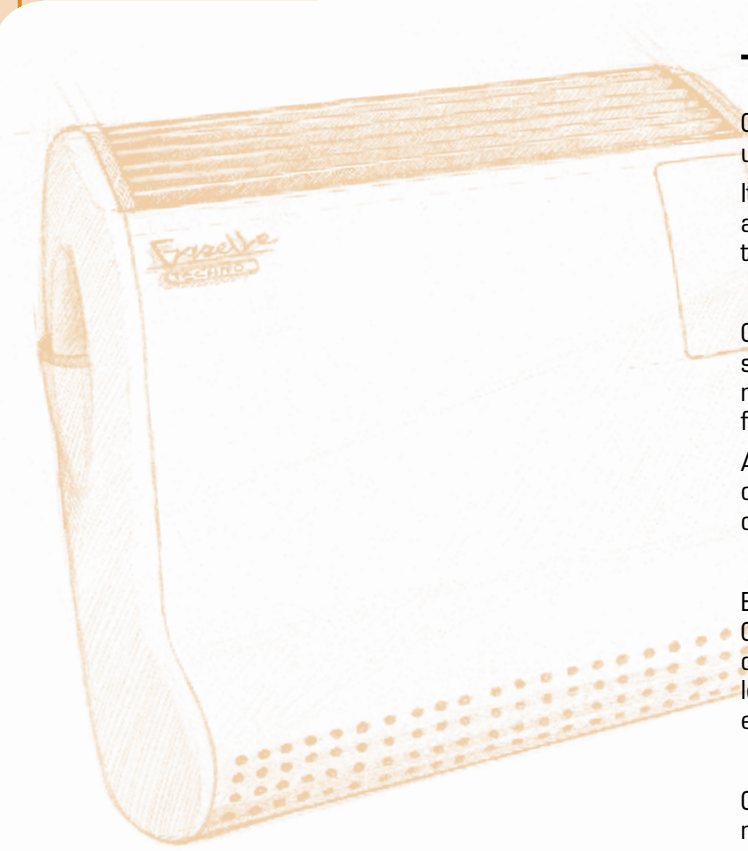
Gazelle TECHNO

DESIGN



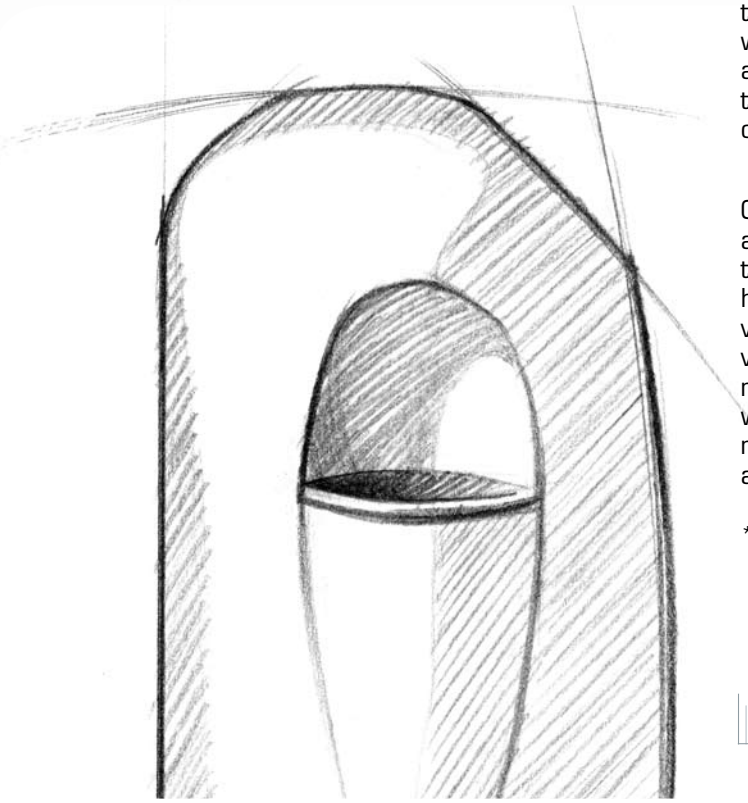
The result of lengthy experience and technological research, GAZELLE TECHNO today is a universally recognised gas radiator*.

It has been completely re-designed and uses a new pre-mixing technology.

GAZELLE TECHNO features a smooth, streamlined shape and reduced dimensions, making it ideal for use in any room.

A handy humidifier is incorporated on one side, providing an added touch of originality.

Built using state-of-the-art technology, GAZELLE TECHNO features high output, very low consumption and low emissions to guarantee negligible environmental impact.



GAZELLE TECHNO is the first gas radiator featuring PRE-MIXING but the range also includes models with a forced-draft and natural-draft atmospheric burners and a range of thermal capacities to suit all home or office applications.

GAZELLE TECHNO gas radiators are autonomous heating appliances that are ideal for use in renovated houses, holiday homes, shops and a variety of other buildings. They are very easy to fix onto the wall and require only a very little masonry work. They can be installed in any room and extra units can be added at any time.

* Gas radiators are classified as "Convective gas stoves"

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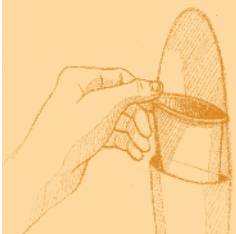


Gazelle TECHNO

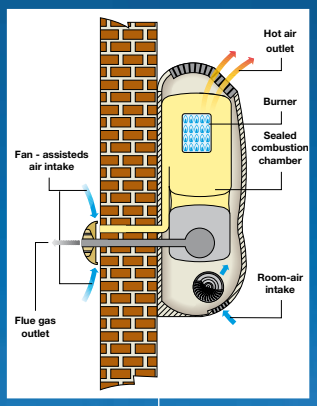
COMFORT

Our philosophy is comfort, essential design, efficiency and quality.

GAZELLE TECHNO is the utmost expression of this ideal as it generates heat simply and effectively.

The radiator can be switched on and off automatically by setting the timer. Maintaining a constant controlled temperature in a room has never been so quick and easy thanks to automatic regulation of the power level. The results are fuel saving, reduced emissions and a uniform temperature.

Autonomous heating can now be controlled in complete safety because GAZELLE TECHNO is a sealed appliance that draws air in from outside and also discharges combustion gases externally.



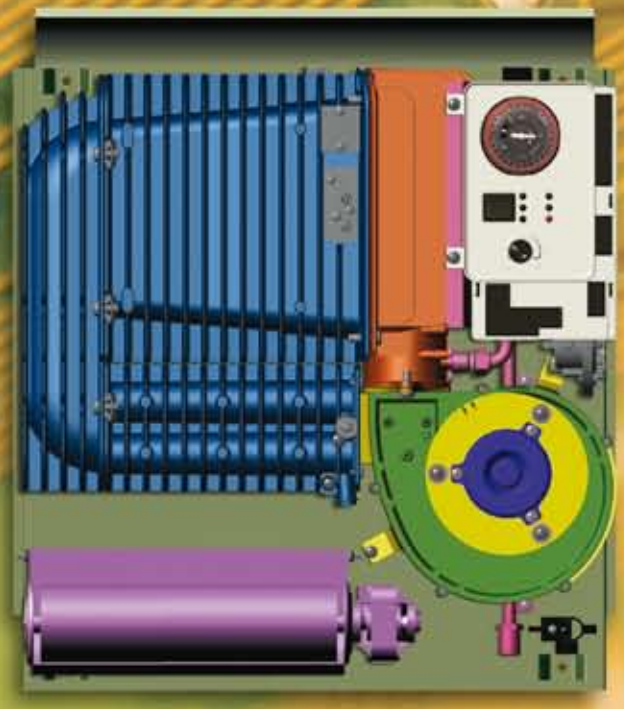
The humidifier on the side has also been designed in line with our quest for total comfort. It is easy to fill with water and fits snugly in position.

GAZELLE TECHNO is very easy to install and does not require any modification to existing systems or major work involving the floors and walls. In short, it is the best way to heat any room in the building.

And in holiday homes the risk of a burst pipe in the winter – always a worry with traditional systems - is entirely eliminated.

Gazelle TECHNO

TECHNICAL FEATURES

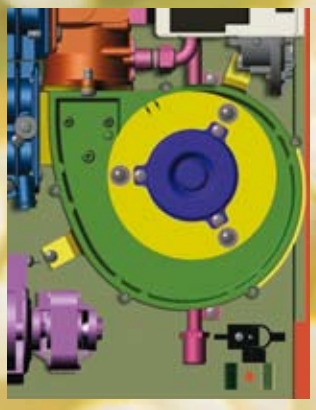


GAZELLE TECHNO – versions Classic and Premix – introduces technical concepts and state-of-the-art design that reduce consumption and emissions and make it easier to install and operate.

The microprocessor-controlled electronics optimises operation and control. The instrument panel, which is intuitive to use, comes with the following:

- safety cut-out alarm buzzer;
- sockets for connecting several units to a single thermostat and timer;
- socket for connection to a telephone sequence switch.

Besides the intrinsic safety of class C radiators with a sealed chamber, these units feature combustion and operation control systems for complete peace of mind.



Combustion air intake fan motor with variable speed and intelligent monitoring (PREMIX model)

Valve with fixed air-to-gas ratio (PREMIX model)

Flue gas sampling point

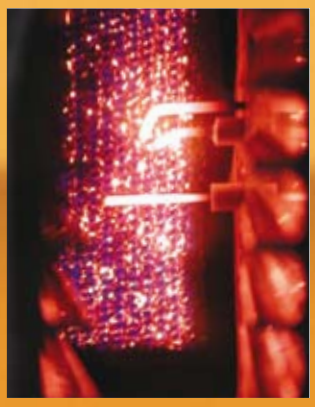
MODELS AND VERSIONS

2200 - 2200 VT

The GAZELLE TECHNO 2200 is a natural draught radiator with a sealed chamber, a pilot flame and a safety device with a thermocouple that does not require a source of electricity. Model 2200 VT has a convection fan that can be switched on to heat the room more evenly.

CLASSIC

The CLASSIC version combines conventional combustion with an atmospheric burner, advanced design, and electronic control – a feature of the whole range. Optimal design for improved efficiency.



PREMIX

The PREMIX version, with premixing of the combustion gas, features a horizontal burner, a constant air-to-gas ratio, low consumption and reduced emissions.

LOW NO_x

Top performance is guaranteed by the die-cast aluminium combustion chamber, with a large heat-exchange surface to recover heat from the flue gas.

Gazelle TECHNO

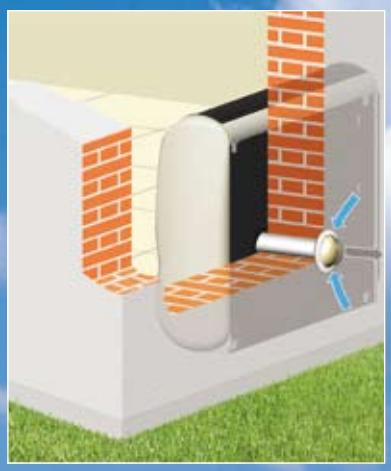
FLUE GAS OUTLETS

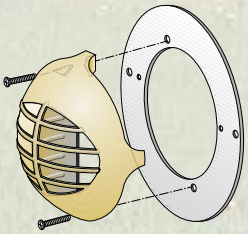
In systems where these appliances are installed, it is possible to determine the exact position of the pipes which can easily be split and extended as required.

A supporting bracket a mere 47 mm thick can be provided for installing separate pipes that are not buried in the wall.

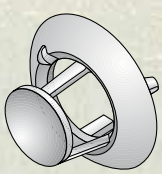
Some of the possible solutions are illustrated on these pages. The maximum length of the flue gas outlets is given in the tables on page 10.

PIPING SAMPLE APPLICATIONS

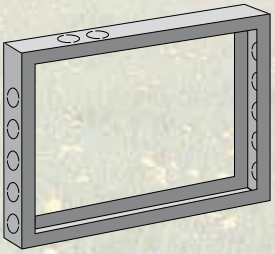




STANDARD AIR INTAKE / FLUE GAS OUTLET TERMINAL



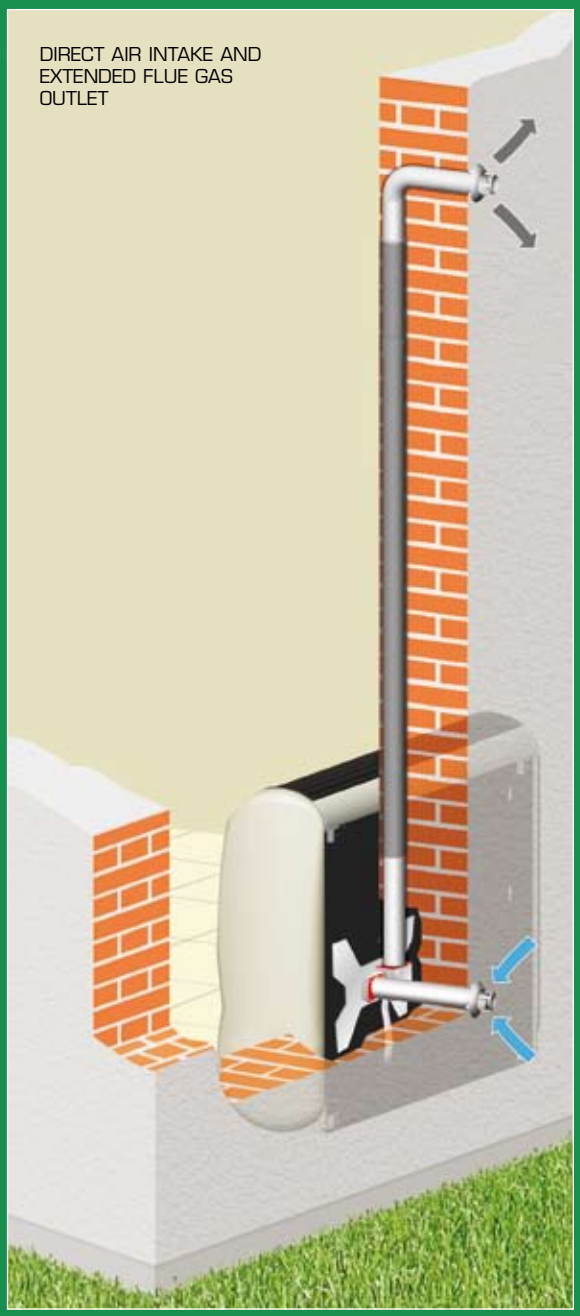
Ø 35 M AIR INTAKE / FLUE GAS OUTLET TERMINAL FOR SPLIT PIPES



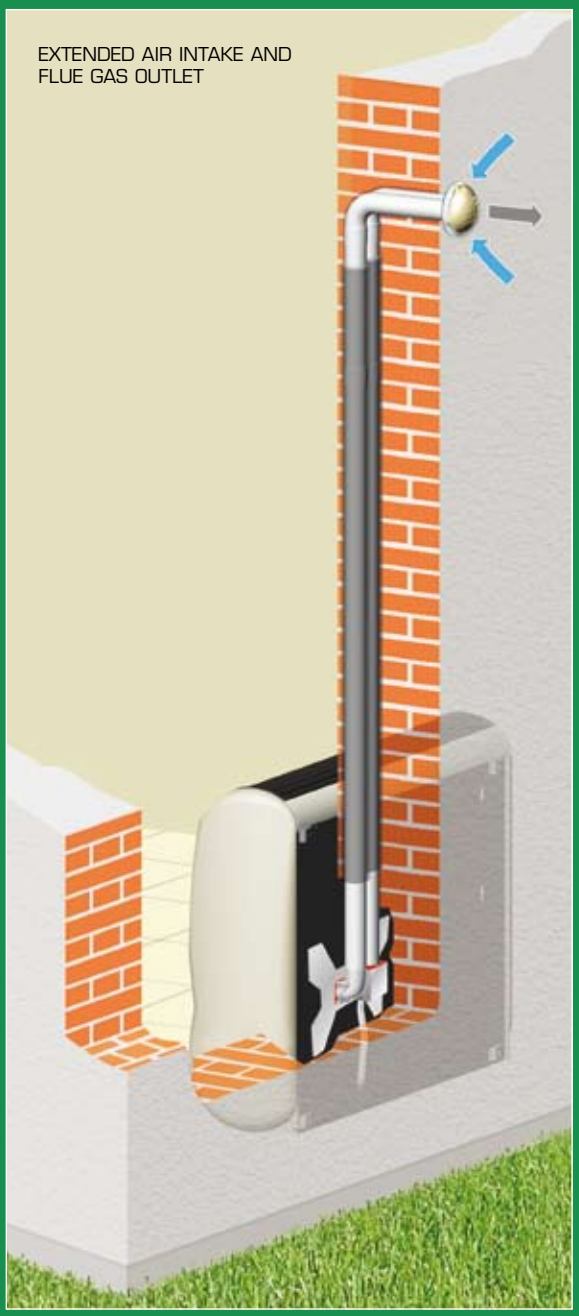
COUNTER-FRAME FOR INSTALLATIONS WITH PIPES ON INDOOR WALLS

WALL FIXING SYSTEM WITH BRACKET (SOME INSTALLATION EXAMPLES)

DIRECT AIR INTAKE AND EXTENDED FLUE GAS OUTLET

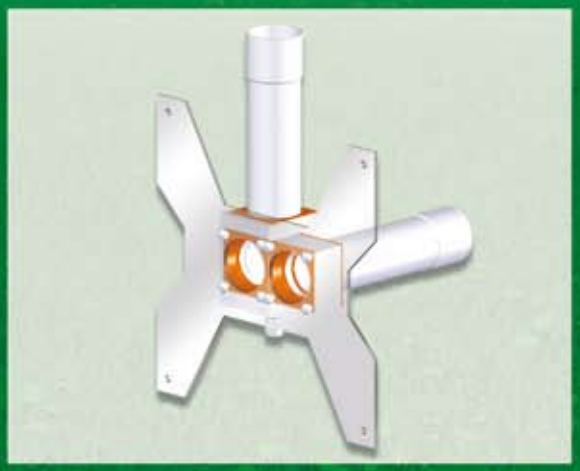


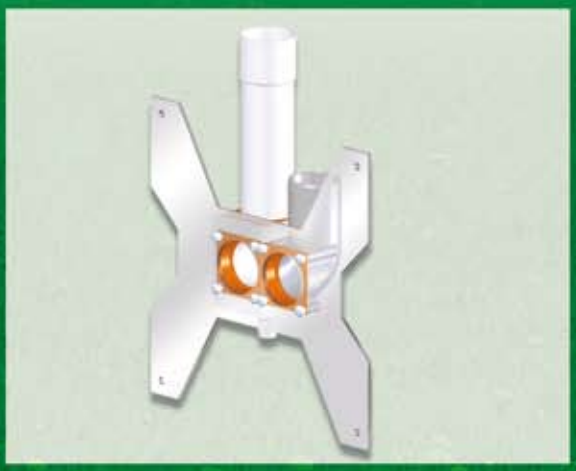
EXTENDED AIR INTAKE AND FLUE GAS OUTLET



These pictures are merely an indication.

Note: Properly insulate flue gas oultets and install a condensate drain where needed





Gazelle TECHNO

LOAD LOSS THROUGH PIPES

The load loss of the air intake/flue gas outlet pipe must be less than the maximum value given. It can be calculated by adding together the load losses of the individual parts of the system (elbows, adaptors, pipes, terminals, etc.) shown in the tables below.

GAZELLE TECHNO CLASSIC		3000		5000	
Maximum load loss	Pa	8		12	
Outside diameter of pipes	mm	35	60	35	60
Starting 90° elbow for split system	Pa	2	-	2	-
90° elbow	Pa	0.5	0.2	2	0.75
45° elbow	Pa	-	0.1	-	0.35
Pipe	Pa/m	0.5	0.2	2	0.75
Standard air intake/flue gas outlet terminal	Pa	0.5	-	1	-
Individual air intake/flue gas outlet terminal	Pa	0.25	0.2	0.5	0.3
25 mm diaphragm (see * and **)	Pa	4*	-	2**	-
Condensate drain	Pa	0.5	0.2	1	0.3
90°, Ø 35 mm condensate drain	Pa	2	-	2	-
35/60 adaptor	Pa	-	0.2	-	0.2
Roof terminal	Pa	-	0.1	-	0.2

* Must be used with air intake pipes if the total load loss (air intake + flue gas outlet) is less than or equal to 4 Pa.

** Must be used with air intake pipes if the total load loss of the air intake pipe is less than or equal to 4 Pa.

GAZELLE TECHNO PREMIX		3000		5000		7000	
Maximum load loss	Pa	7		6		10	
Outside diameter of pipes	mm	35	60	35	60	35	60
Starting 90° elbow for split system	Pa	0.4	-	0.6	-	1.5	-
90° elbow	Pa	0.3	0.1	0.4	0.1	1	0.2
45° elbow	Pa	-	0.05	-	0.05	-	0.1
Pipe	Pa/m	0.3	0.1	0.4	0.1	1	0.2
Standard air intake/flue gas outlet terminal	Pa	0.1	-	0.2	-	0.3	-
Individual air intake/flue gas outlet terminal	Pa	0.05	0.05	0.1	0.05	0.15	0.05
Condensate drain	Pa	0.1	0.1	0.2	0.1	0.3	0.1
90°, Ø 35 mm condensate drain	Pa	0.4	-	0.6	-	1.5	-
35/60 adaptor	Pa	-	0.1	-	0.1	-	0.1
Roof terminal	Pa	-	0.05	-	0.05	-	0.05

SAMPLE CALCULATION

GAZELLE TECHNO CLASSIC 5000

- Split air intake and flue gas outlet pipes
- Direct air intake behind the appliance
- Roof flue gas outlet – discharge height 6 metres

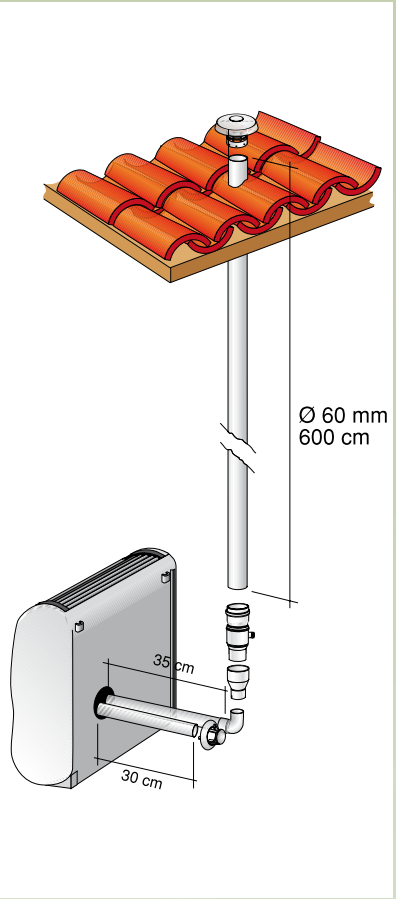
The table shows that the maximum load loss is: **12 Pa**

Air intake:
Pipe diameter 35 mm, length 30 cm = 2 x 0.30 = 0.6 Pa
Single air intake terminal = 0.5 Pa

The air intake load loss is 1.1 Pa, which is less than 4 Pa so a diaphragm must be installed on the air intake pipe, as specified in the note.

Load loss due to the diaphragm = 2 Pa

Flue gas outlet:
1 pipe diameter 35 mm, length 35 cm = 2 x 0.35 = 0.7 Pa
90° elbow Ø 35 mm = 2 Pa
35/60 adaptor = 0.2 Pa
Condensate drain Ø 60 mm = 0.3 Pa
Six pipes Ø 60 mm, length 1 m = 0.75 x 6 = 4.5 Pa
Roof flue gas outlet terminal = 0.2 Pa
Total = 0.6 + 0.5 + 2 + 0.7 + 2 + 0.2 + 0.3 + 4.5 + 0.2 = 11 Pa
11 Pa < 12 Pa ==> SOLUTION ALLOWED



GAZELLE TECHNO PREMIX 5000

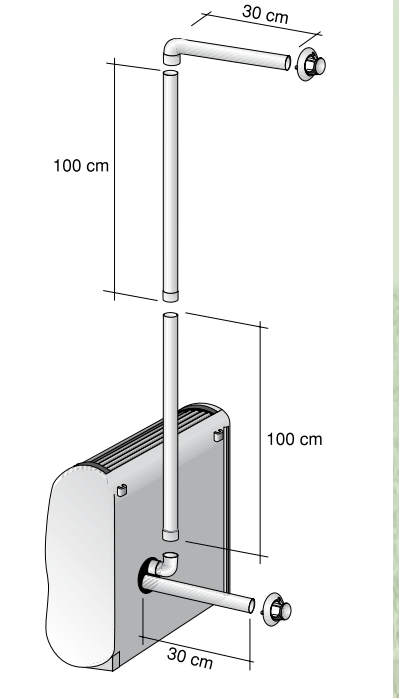
- Split air intake and flue gas outlet pipes
- Direct air intake behind the appliance
- Wall flue gas outlet with 2-metre pipes

The table shows that the maximum load loss is: **6 Pa**

Air intake:
Pipe diameter 35 mm, length 30 cm = 0.4 x 0.30 = 0.12 Pa
Single air intake terminal = 0.1 Pa

Flue gas outlet:
90° elbow for split pipes = 0.6 Pa
2 pipes diameter 35 mm, length 1 m = 0.4 x 2 = 0.8 Pa
90° elbow Ø 35 mm = 0.4 Pa
1 pipe diameter 35 mm, length 30 cm = 0.4 x 0.3 = 0.12 Pa
Flue gas outlet terminal = 0.1 Pa
Total = 0.12 + 0.1 + 0.6 + 0.8 + 0.4 + 0.12 + 0.1 = 2.24 Pa
2.24 Pa < 6 Pa ==> SOLUTION ALLOWED

NOTE:
When using extensions, it is advisable to install the condensate drain accessories and to insulate the flue gas outlet pipes as specified in the instruction manual provided with the appliance.



THE RANGE

The new range of GAZELLE TECHNO gas radiators includes models of different capacities and designs. Colour is Grey White.

Grey White
Ral 9002.

GAZELLE TECHNO 2200

Gas radiator with natural-draught atmospheric burner, piezoelectric ignition, pilot flame and thermocouple flame control.
Heat output 2.44 kW.
No electrical connections needed.

GAZELLE TECHNO 2200 VT

Gas radiator with natural-draught atmospheric burner, piezoelectric ignition, pilot flame and thermocouple flame control.
Convection turbo fan option.
Heat output 2.66 kW.

GAZELLE TECHNO CLASSIC

Gas radiator with atmospheric burner, electronic ignition and ionisation flame control.
Automatic HIGH/LOW/OFF settings.
Three models with heat output 2.8 kW, 4.6 kW and 6.15 kW.

GAZELLE TECHNO PREMIX

Gas radiator with pre-mixing, electronic ignition and ionisation flame control.
Automatic HIGH/LOW/OFF settings.
Three models with heat output 2.76 kW, 4.6 kW and 6.3 kW.

GAZELLE TECHNO 2200-2200 VT

TECHNICAL DATA			
MODEL		**2200**	**2200 VT**
Type	-	C11	C11
Category	-	II 2H3+	II 2H3+
		STANDARD OUTLET	STANDARD OUTLET
Max pipe length	mm	600	600
Outside diameter of air intake/ flue gas outlet pipe	mm	115	115
Gas coupling diameter	inches	male G 3/8	male G 3/8
Standard natural gas consumption at Pn	m^3/h	0.295	0.314
Standard LPG consumption at Pn	Kg/h	0.220	0.234
Rated heat input	W	2790	2970
Reduced heat input	W	1800	1800
Rated heat output	W	2445	2660
Reduced heat output	W	1450	1535
Efficiency at rated heat output	%	87.6	89.6
Voltage and frequency	V-Hz	-	230-50
Maximum power consumption	W	-	10
Fan capacity	m^3/h	-	84
No. of CE certificate	-	51BP02707	

TECHNICAL FEATURES

2200
2200 VT

- Heat exchanger body made of die-cast aluminium
- Natural-balance flue gas outlet, diameter 115 mm coaxial air intake/flue gas outlet pipes
- Pipes up to 1 metre in length
- Manual piezoelectric ignition
- Gas safety device with thermocouple
- Thermostat-controlled modulating gas valve
- Atmospheric burner
- Built-in humidifier

For model 2200 VT only:

- Axial convection fan option
- Day or week timer

Gazelle TECHNO

GAZELLE TECHNO CLASSIC

TECHNICAL DATA							
MODEL		**3000**		**5000**		**7000**	
Type	-	C13, C53		C13, C53		C13, C53	
Category	-	II 2H3+		II 2H3+		II 2H3+	
Rated heat input	W	3000		5000		6800	
Reduced heat input	W	2100		3400		5000	
Rated heat output	W	2811		4610		6154	
Reduced heat output	W	1940		3074		4460	
		Nat.gas	**LPG**	**Nat.gas**	**LPG**	**Nat.gas**	**LPG**
Efficiency at rated heat output	%	93.7	94.2	92.2	92.8	90.5	91,4
Efficiency at reduced heat output	%	92.4	93.3	90.4	90.8	89.2	89,6
Max NOx value	mg/kWh	173.8	204	79.8	111	126.3	194
NOx emission class	-	3		5		4	
Outside diameter of straight outlet pipe	mm	55					
Outside diameter of split pipes	mm	Ø 35 or Ø 60					
Gas coupling diameter	inches	male G 1/2					
Standard natural gas consumption at Pn	m^3/h	0.317		0.529		0.719	
Standard LPG consumption at Pn	Kg/h	0.237		0.395		0.537	
Voltage and frequency	V-Hz	230-50					
Maximum power consumption	W	60		82		82	
No. of CE certificate	-	51BP02706					

TECHNICAL FEATURES

CLASSIC

- Finned heat exchanger made of die-cast aluminium, high efficiency
- Two-channel heat recovery unit made of die-cast aluminium
- Split and extendible air intake and flue gas outlet pipes
- Centrifugal combustion fan
- Two-speed tangential convection fan
- Atmospheric burner
- Electronic ignition
- Ionisation flame control
- Microprocessor-controlled electronics
- Instrument panel with lights indicating emergency cut-out, minimum output, maximum output, power on and overheating, and a release button
- Safety thermostat
- Safety pressure switch
- Adjustable gas valve
- Automatic HIGH/LOW/OFF settings
- Delayed switch on/off for the convection fan
- Room temperature selector with frost guard setting
- Built-in humidifier
- Day or week timer

GAZELLE TECHNO PREMIX

TECHNICAL DATA							
MODEL		**3000**		**5000**		**7000**	
Type	-	C13, C53		C13, C53		C13, C53	
Category	-	II 2H3+		II 2H3+		II 2H3+	
Rated heat input	W	3000		5000		6800	
Reduced heat input	W	2100		3200		5000	
Rated heat output	W	2760		4610		6280	
Reduced heat output	W	1989		3030		4730	
		Nat.gas	**LPG**	**Nat.gas**	**LPG**	**Nat.gas**	**LPG**
Efficiency at rated heat output	%	92	93	92.2	93.6	92.3	93
Efficiency at reduced heat output	%	94.7	95.4	94.7	95.6	94.6	95
Max NOx value	mg/kWh	31	80	29	73	56	127
NOx emission class	-	5					
Outside diameter of straight outlet pipe	mm	55					
Outside diameter of split pipes	mm	Ø 35 or Ø 60					
Gas coupling diameter	inches	male G 1/2					
Standard natural gas consumption at Pn	m^3/h	0.317		0.529		0.719	
Standard LPG consumption at Pn	Kg/h	0.237		0.395		0.537	
Voltage and frequency	V-Hz	230-50					
Maximum power consumption	W	50		50		57	
No. of CE certificate	-	51BP02705					

TECHNICAL FEATURES

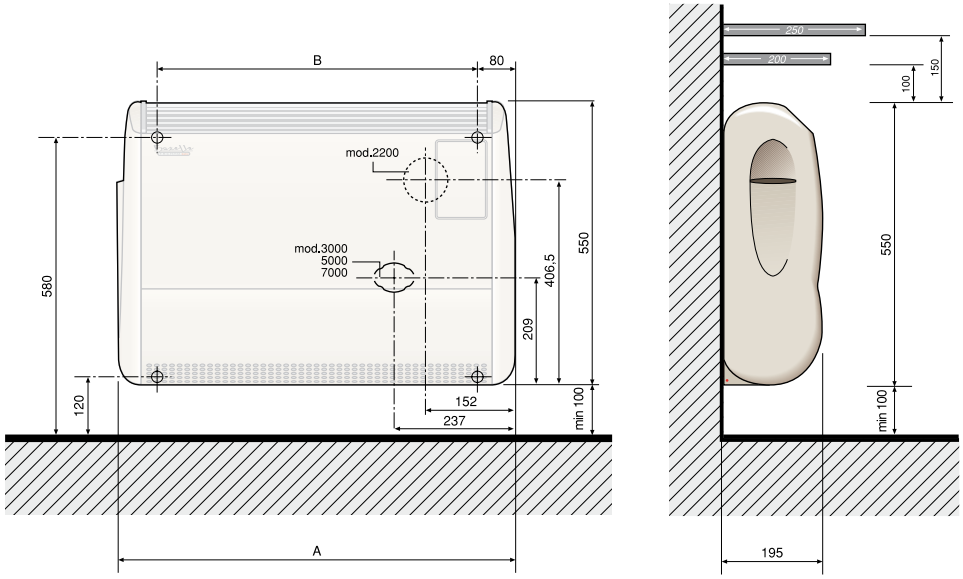
PREMIX

- Finned heat exchanger made of die-cast aluminium, high efficiency
- Two-channel heat recovery unit made of die-cast aluminium
- Split and extendible air intake and flue gas outlet pipes
- Two-speed centrifugal combustion fan
- Two-speed tangential convection fan
- Pre-mixing burner
- Electronic ignition
- Ionisation flame control
- Microprocessor-controlled electronics
- Instrument panel with lights indicating emergency cut-out, minimum output, maximum output, power on and overheating, and a release button
- Safety thermostat
- Safety pressure switch
- Gas valve with constant air-to-gas ratio
- Automatic HIGH/LOW/OFF settings
- Delayed switch on/off for the convection fan
- Room temperature selector with frost guard setting
- Built-in humidifier
- Day or week timer

PATENTS

The GAZELLE TECHNO is a gas radiator with several innovative features that uses exclusive technology.
The following features have been patented:
- Connector for split air intake and flue gas outlet
- Two-chamber heat recovery unit
- Combustion chamber with varying cross-section
- Fins inside the heat exchanger
- Collector for different kinds of burners
- Flue gas sampling point
- Two-chamber centrifugal fan with eccentric air intake opening
- Built-in side humidifier

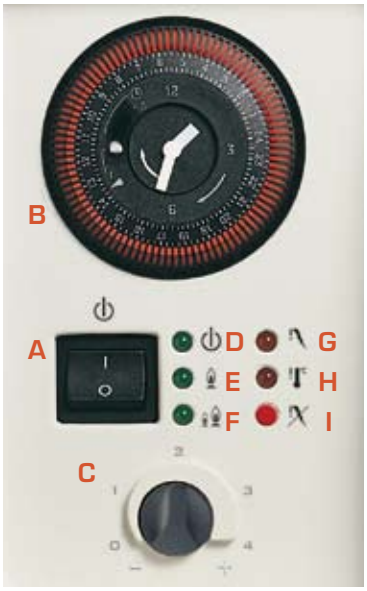
DIMENSIONS



DIMENSIONS AND WEIGHT – 2200, CLASSIC, PREMIX

MODEL	2200	2200 VT	3000	5000	7000
Width (A)	547		547	667	772
Centre distance (B)	387		387	507	612
Weight (including packaging) Kg	24	25	22	26	29

INSTRUMENT PANEL



CLASSIC – PREMIX
A = On/off switch
B = Timer
C = Temperature selector
D = Power-on light (green)
E = Burner minimum power light (green)
F = Burner maximum power light (green)
G = Cut-out light (red)
H = Overheating cut-out light (red)
I = Reset button

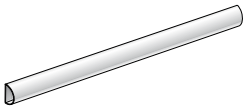
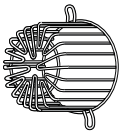
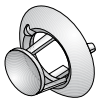
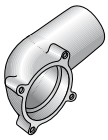
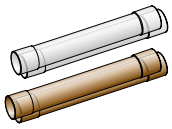
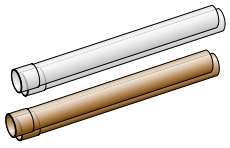
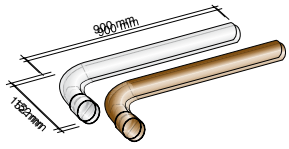
Gazelle Techno gas radiators can be connected to the following:
1) an external room thermostat
2) a telephone sequence switch for remote start-up
3) a remote cut-out signal (lamp or telephone sequence switch
   - only for PREMIX models)
4) other gas radiators with a single remote timer/thermostat

ACCESSORIES

2200 - 2200 VT

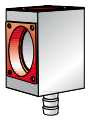
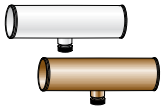
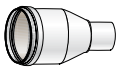
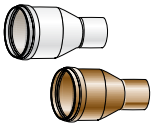
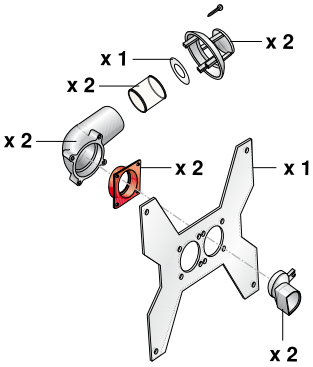
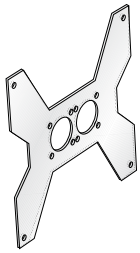
		Each pack contains	Code
	Safety grid for square terminal	1 pc.	6Y41309500

CLASSIC - PREMIX

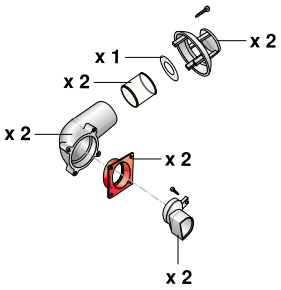
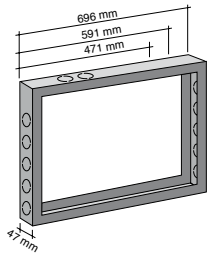
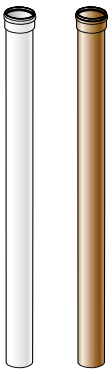
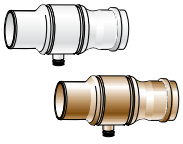
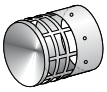
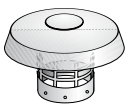
			Each pack contains	Code
	Standard pipe, 1 m		2 pcs.	6YTUBOAL01
	Safety grille for round terminal		1 pc.	6Y41309000
	Single terminal for Ø 35 mm pipe		2 pcs.	6YTERSDO00
	Adapter for split flue gas outlet		2 pcs.	6YRIDSDO00
	Starting elbow for split flue gas outlet		2 pcs.	6YCURSDO00
	Ø 35 mm double socket-and-spigot pipe length 0.50 m F/F	*white*	6 pcs.	6YTUBSDO13
		brown	6 pcs.	6YTUBSDO14
	Ø 35 mm socket-and-spigot pipe length 1 m M/F	*white*	6 pcs.	6YTUBSDO00
		brown	6 pcs.	6YTUBSDO03
	Ø 35 mm socket-and-spigot pipe with 90° elbow, length 0.90 m M/F	*white*	6 pcs.	6YTUBSDO02
		brown	6 pcs.	6YTUBSDO04
	90° elbow for Ø 35 mm pipe, M/F	*white*	3 pcs.	6YCURSDO05

ACCESSORIES

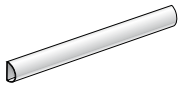
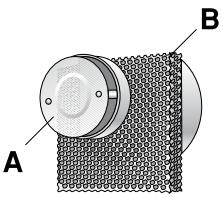
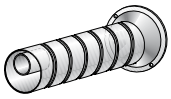
CLASSIC - PREMIX

			Each pack contains	Code
		90°, Ø 35 mm, F/F condensate drain for vertical pipes (complete with seals)	1 pc.	6YSCACON06
		Ø 35 mm, F/F condensate drain for horizontal installation (complete with seals) — *white*	2 pcs.	6YSCACON00
		Ø 35 mm, F/F condensate drain for horizontal installation (complete with seals) — *brown*	2 pcs.	6YSCACON01
		Ø 60 mm ÷ Ø 35 mm, F/M adapter	2 pcs.	6YRIDSDO03
		Ø 60 mm ÷ Ø 35 mm, F/F adapter — *white*	2 pcs.	6YRIDSDO01
		Ø 60 mm ÷ Ø 35 mm, F/F adapter — *brown*	2 pcs.	6YRIDSDO02
A		Ø 35 mm appliance/adapter seal for pipe	10 pcs.	6YGUASDO00
B		Ø 35 mm seal for connecting pipes	10 pcs.	6YGUASDO02
D		Ø 35 mm adapter/elbow seal	10 pcs.	6YGUASDO04
		Ø 35 mm split pipe kit with supporting bracket **The kit includes:** 1 supporting bracket 2 starting elbows for split flue gas outlet 2 adapters for split flue gas outlet 2 single Ø 35 mm flue gas terminals 1 air shutter 2 **A**-type seals 2 **B**-type seals 2 **D**-type seals 8 3.9x9.5 screws 2 3.9x9.5 screws for terminal fixing 4 dowels	1 pc.	6YKITSDO01
ADDITIONAL FITTINGS TO KIT CODE 6YKITSDO01		Ø 35 mm F/F condensate drain for horizontal installation (complete with seals)	1 pc.	6YSCACON05
		90°, Ø 35 mm, F/F condensate drain for vertical pipes (complete with seals)	1 pc.	6YSCACON06
		Ø 35 mm F/F coupling sleeve for pipe connection (complete with seals)	2 pcs.	6YMANSCA00
		Supporting bracket (with seals and dowels)	1 pc.	6YPIAMUR00

CLASSIC - PREMIX

			Each pack contains	Code
	35 mm split pipe kit containing the following: 2 adapters 2 starting elbows 2 adapter/elbow **D**-type seals 1 air diaphragm 2 **B**-type seals for connecting pipes 2 Ø 35 mm single flue gas terminals 6 screws 2 fixing brackets		1 pc.	6YKITSDO00
	Wall spacer counter-frame, depth 47 mm, width 471 mm - *for Classic 3000 - Premix 3000*		1 pc.	6YTELAIO00
	Wall spacer counter-frame, depth 47 mm, width 591 mm - *for Classic 5000 - Premix 5000*		1 pc.	6YTELAIO01
	Wall spacer counter-frame, depth 47 mm, width 696 mm - *for Classic 7000 - Premix 7000*		1 pc.	6YTELAIO02
	Ø 60 mm pipe length 0.25 m M/F	*white*	6 pcs.	6YTUBSDO05
		brown	6 pcs.	6YTUBSDO06
	Ø 60 mm pipe length 0.50 m M/F	*white*	6 pcs.	6YTUBSDO07
		brown	6 pcs.	6YTUBSDO08
	Ø 60 mm pipe length 1.00 m M/F	*white*	6 pcs.	6YTUBSDO09
		brown	6 pcs.	6YTUBSDO10
	Ø 60 mm pipe length 2.00 m M/F	*white*	6 pcs.	6YTUBSDO11
		brown	6 pcs.	6YTUBSDO12
	Ø 60 mm, 90° elbow for pipe M/F	*white*	4 pcs.	6YCURSDO01
		brown	4 pcs.	6YCURSDO02
	Ø 60 mm, 45° elbow for pipe M/F	*white*	4 pcs.	6YCURSDO03
		brown	4 pcs.	6YCURSDO04
	Ø 60 mm condensate flue gas outlet M/F	*white*	2 pcs.	6YSCACON02
		brown	2 pcs.	6YSCACON03
	Ø 60 mm air intake or flue gas outlet brace terminal, F		2 pcs.	6YTERCON00
	Ø 60 mm upright flue gas terminal, F	*aluminium*	2 pcs.	6YTERSCA00
		brown	2 pcs.	6YTERSCA01
	Ø 60 mm pipe clip	*white*	10 pcs.	6YCOLSCA00
		brown	10 pcs.	6YCOLSCA01

STANDARD ACCESSORIES

		Each pack contains	Code
	Standard pipe length 59 cm *Classic - Premix*	2 pcs.	6YTUBOAL00
	Ø 50 mm air intake and flue gas outlet terminal for single pipe *Classic - Premix*	1 pc.	6YTERMIN01
	Air intake/flue gas outlet terminal flange	1 pc.	6YLAMTER00
	**A)** Standard brace terminal for versions 2200 and 2200 VT	1 pc.	6Y41035100
	B) Chimney pipe	1 pc.	6Y41054100
	Air intake and flue gas outlet pipe, length 60 cm for series 2200 and 2200 VT	1 pc.	6Y41057100
	Installation kit — *model 2200*	1 pc.	6YKITIST34
	Installation kit — *model 3000 CLASSIC*	1 pc.	6YKITIST35
	Installation kit — *model 5000/7000 CLASSIC*	1 pc.	6YKITIST36
	Installation kit — *model PREMIX*	1 pc.	6YKITIST37

THE SUPPLY INCLUDES THE FOLLOWING:

- One gas radiator wrapped in polystyrene foam in a cardboard box
- Assembly kit: template for the fixing holes and flue gas outlet
- Handbook containing instructions for installation and use
- Standard twin air intake and flue gas outlet pipe, length 59 cm (for Classic, Premix)
- Coaxial pipe length 60 cm for 2200 and 2200 VT
- 3 seals for standard pipes (excluding 2200 and 2200 VT)
- Standard air intake/flue gas outlet terminal
- Air intake shutter (for Classic only)

Gazelle
TECHNO

10/2013

Lipovica®
HLINÍKOVÉ RADIÁTORY

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