



# Air-air rooftop units with a built in gas burner



Cooling capacity: 58,9 to 135,5 kW  
 Heating capacity: 62,2 to 143,4 kW

Scroll compressors  
 R-410A refrigerant  
 Built in gas burner  
 Silent operation

## DESCRIPTION

The **Space PG** cooling units and heat pumps are autonomous air-air units with a compact monoblock, horizontal rooftop design with a built in natural or propane gas burner (in accordance with the gas Directive 90/396 EEC).

They are equipped with centrifugal and axial fans, air coils, hermetic scroll compressors and electronic control with microprocessor, components optimised for the R-410A refrigerant.

These units have been designed for the air conditioning of large surface areas used for business or industry in areas with particularly low outdoor temperatures in winter.

A vast number of options meet numerous operating demands thus enabling quick installation and reliable operation.

All of the units are tested and checked in the factory.

## SERIES

### Space RPG Series

Autonomous air-air **cooling** units with a compact horizontal rooftop design with a built in gas burner.

### Space IPG Series

Autonomous reversible air-air **heat pump** units with a compact horizontal rooftop design with a built in gas burner.

## RANGE

- Series RPG - IPG: 2 cooling circuits, 2 compressors, 10 models:  
 241 / 321 / 361 / 242 / 322 / 362 / 420 / 485 / 540 / 600

## RANGE OF BURNERS

Space PG		241	321	361	242	322	362	420	485	540	600
Maximum heating capacity (kW)	PCH-43	47						47			
	PCH-54	58						58			
	PCH-72	73						73			
	PCH-92							93			
	PCH-150							145			
	PCH-200							197			

## OPERATION LIMITS

Inlet air conditions		Cooling	Heating
Indoor coil heat pump	Minimum	14°C WB	10°C
	Maximum	22°C WB	27°C
Outdoor coil heat pump	Minimum	12°C ①	-10°C WB ③
	Maximum	48°C ②	15°C WB
Gas Burner	Minimum	--	-30°C

- ① With a condensation pressure control operating down to -10°C.
- ② With high powered axial fan operating up to 52°C.
- ③ With outdoor temperatures below -8°C WB it is compulsory to select the anti-freeze protection option for the electric panel.

### UNIT COMPONENTS

#### Standard equipment

- Casing made of galvanised steel metal with polyester paint, grey graphite colour RAL 7024 and white. Thermal insulation 10 mm thick, fire classification M1.
- Self-supporting frame and access panels to the electric panel, compressors, fans, etc.

#### Outdoor circuit

- Axial 2-speed fans directly coupled to the motor. Watertight motor class F, IP54 and internal thermal protection. Dynamically balanced propellers and outdoor protective grille.
- Coil with copper pipes and aluminium fins.

#### Indoor circuit

- Centrifugal fans coupling by pulleys and belts. Two double-intake turbines, with an impeller with front-curved blades. Greased spherical bearings, with no maintenance required. Two electric motors with tensioner, class F, IP55 and internal thermal protection.
- Reusable air filters, assembled on a frame.
- Coil with copper pipes and aluminium fins.
- Condensates drain pan in galvanised steel.

#### Gas burner

- Natural gas or propane gas burner designed in accordance with the standards in force in compliance with the Gas Directive 90/396 EEC.
- Output control with proportional actuator 0-10V performed by the burner's own control.
- Condensation boiler with premixing and modulation technology that allows performance close to 105% with regard to the lower heating value (LHV).
- Combustion chamber in stainless steel AISI 430 and pipes for the hot gas exchanger and the smoke outlet manifold in stainless steel with a low carbon AISI 304L content to guarantee a high resistance to condensation.
- The recovery pipes have a flat design and grooves to increase turbulence thus increasing the heat transfer coefficient and therefore reducing the fuel consumption.

#### Cooling circuit

- Hermetic scroll-type compressor with sound insulation, assembled on antivibration mounts. Control of phase equilibrium and the direction of rotation.
- Crankcase heater (heat pump units).
- Four-way cycle reversing valves (heat pump units).
- Anti-acid dehydrator filters.
- Thermostatic expansion valves with external equalisation.

#### Protections

- High and low pressure pressostats.
- Compressor discharge temperature control.
- Non-return valve built into the compressor.
- Klixon in the compressor.
- Differential pressostat for control of air flow.
- Main door switch.
- Magnetothermic protection switches for the compressor power line and fan motor.
- Automatic switch in the control circuit.

#### Electric panel

- Complete and fully wired electrical panel which is insulated to avoid condensation. Protection IP55.
- Transformer for power supply without neutral.
- Main ground connection.
- Compressor and fan motor contacts.

#### AVANT Pro electronic control

This electronic module with microprocessor comprised of a control board and a user terminal pGD1 ensures the following functions:

- Selection of the operating mode and the setpoint.
- Permanent control of the operating parameters.
- View of the values measured by the probes.
- Timing of the compressors
- Defrosting management (in heat pump units).
- Operation of all the stations via the condensation and evaporation pressure control.
- Control of the outlet temperature.
- Compensation of the setpoint in accordance with the outdoor T.
- Control of air flow.
- Control of the burner as backup for heating, depending on ambient conditions. This is managed using an ON/OFF signal.
  - \* In cooling-only units, the control will activate the burner the same way as an electrical heater stage.
  - \* In heat pump units, it's possible to choose three different operating modes:
    - The burner will operate then the compressors, as an electrical heater stage.
    - The burner will operate instead of the compressors.
    - This will operate instead of the compressors if the outdoor temperature is less than the value marked on an outdoor thermostat.
- Setting of the power will be carried out by the burner's own control in accordance with the signal received from the AVANT Pro control.
- Daily and weekly programming.
- Anti-fire safety.
- Failure diagnosis and main alarm.



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**Optional functions:**

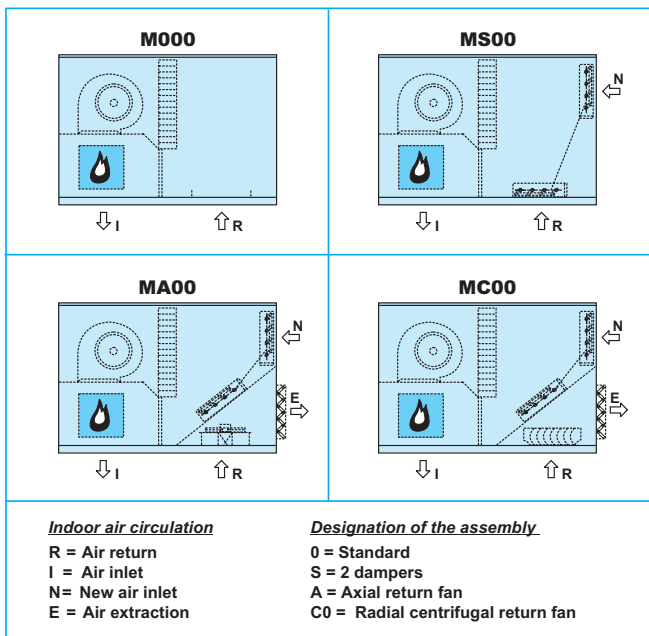
- Humidity control.
- Management of thermal, enthalpic or thermoenthalpic free-cooling.
- Control of the opening of the outdoor air damper.
- Control of the air quality probe.
- Control of the clogged filter detector, smoke detector and the anti-fire thermostat.
- Possibility of connection to a local pLAN network.
- Communication possibility with a centralised BMS management system for supervision.

The pGD1 terminal can be installed over the unit's electric panel, which is accessible via a collapsible polycarbonate window or remotely with the centralised control of up to 15 units (optional).

**Options**

- Compressors in tandem. This setting improves the management of stages, and therefore the energy efficiency of the unit.
- Assembly with mixing box and free-cooling:
  - 2 dampers (motorised):
    - MS: Outdoor air intake with damper, interlocked with return damper.
  - 3 dampers (motorised):
    - MA: Axial return and air extraction fan with duct (to prevent recirculation).
    - MC0: Lower MC0 radial centrifugal return fan.

- Electrical heater for protection of the components of the electric panel. This is compulsory if the outdoor temperature is lower than -8°C WB. With an outdoor temperature over than -16°C WB will be compulsory a reinforced resistance.
- Dampers with spring for automatic closing in case of a tension cut. This is compulsory if the outdoor temperature is lower than -8°C WB.
- Electrical heater for antifreeze protection of dampers of mixing boxes. This is compulsory if the outdoor temperature is lower than -12°C WB.
- Tropicalised unit. It includes varnish for the elements in the electric panel, tropicalised indoor and outdoor fans.
- Condensates drain pan for the indoor circuit in stainless steel (standard pan in galvanised steel).
- High-powered axial fans in the outdoor circuit.
- Electronic EC axial fans in the outdoor circuit which adapt their rotation speed to the installation requirements, thereby reducing electricity consumption, the sound level at partial charge and improving the average seasonal output of the unit.
- High-pressure outlet fan of the indoor circuit (for available pressure above 30 mm.a.c). Centrifugal fans, coupling by pulleys and belts with an impeller with back-curved blades.
- Control of the overpressure with the MC0 assembly.
- Soft starter of the outlet fan which prolongs the set time mainly aimed at installations with cloth ducts. Compulsory for motors with an output of 15 kW and above.
- Stop-drop in the outdoor air intake.
- Gravimetrics filters G4.
- Opacimetric folded filters F6 to F9 + gravimetric filters G4.
- Differential pressostat for clogged filter detection (recommended).
- Electrical power supply with neutral.
- Energy meter.
- Numeration of components in the electrical panel.
- Numeration of wired.
- Smoke detecting station in accordance with the NF S 61-961 standard.
- Air quality probe for installation in the environment or in duct to enable measuring CO<sub>2</sub> and/or volatile compounds.
- Standardised pre-assembly frames made of galvanised steel panelling, thermally insulated. Adjustable height.
- Shock absorbers made of rubber.
- Skis for transporting in closed container.



- Outdoor coil protection grille.
- Coils (outdoor and/or indoor) with copper pipes and copper fins.
- Coils (outdoor and/or indoor) with copper pipes and aluminium fins with polyurethane and blygold polual coating.
- Thermal and acoustic isolation 50 mm thick, with fire classification Euroclase A2-s1, d0.
- Compressor with protection for low temperature (supplementary crankcase heater). This is compulsory if the outdoor temperature is lower than -8°C WB.

**Available gas burners**

Gas burner models	Space PG									
	241	321	361	242	322	362	420	485	540	600
PCH-43	optional			--			optional			
PCH-54	optional			--			optional			
PCH-72	standard			--			optional			
PCH-92	--			optional			optional			
PCH-150	--			optional			optional			
PCH-200	--			standard			standard			



# Air-air rooftop units with a built in gas burner

## Space PG

### TECHNICAL CHARACTERISTICS

Space PG		241	321	361	242	322	362	420	485	540	600	
Cooling capacities	Cooling capacity ① (kW)	58,9	72,1	82,7	60,3	73,6	84,8	101,7	110,3	123,3	135,5	
	Power input ③ (kW)	21,4	28,1	32,7	21,1	27,5	32,0	33,0	37,0	42,8	49,8	
	EER performance	2,7	2,6	2,5	2,9	2,7	2,6	3,1	3,0	2,9	2,7	
Heating capacities	Heating capacity ② (kW)	62,2	76,7	92,3	62,2	76,1	91,6	105,5	115,5	129,0	143,4	
	Power input ③ (kW)	18,2	21,8	26,6	17,4	20,9	25,5	31,2	35,3	39,1	43,6	
	COP performance	3,4	3,5	3,5	3,6	3,6	3,6	3,4	3,3	3,3	3,3	
Outdoor circuit fan	Nominal air flow (m³/h)	30.000						42.000				
	Available static pressure (mm.a.c)	4										
	Type	Axial										
	Number	2						4				
	Diameter (mm)	2 x 800						2 x 630 + 2 x 800				
	Output (kW)	2 x 2,0 / 1,3						2 x 0,7 / 0,4 + 2 x 2,0 / 1,3				
	Speed (r.p.m.)	895 / 685						875 / 650 895 / 685				
Outlet fan indoor circuit	Nominal air flow (m³/h)	12.000	14.300	15.900	12.000	14.300	15.900	18.000	18.200	20.400	24.000	
	Available static pressure (mm.a.c)	12	12	12	12	12	12	12	12	15	15	
	Type	Centrifugal										
	Number / no. turbines	2 / 2										
	Motor output (kW)	2 x 1,5	2 x 2,2	2 x 3	2 x 1,1	2 x 2,2	2 x 2,2	2 x 2,2	2 x 2,2	2 x 3	2 x 4	
	Power input (kW)	2 x 1,13	2 x 1,67	2 x 2,11	2 x 0,93	2 x 1,35	2 x 1,68	2 x 1,70	2 x 1,74	2 x 2,40	2 x 3,42	
	Speed (r.p.m.)	847	939	995	762	829	870	708	713	790	860	
Compressor	Type	Scroll										
	Number of compressors	2										
	Number of circuits	2										
	Number stages	2										
	Oil type	Copeland 3MAF 32cST, Danfoss POE 160SZ, ICI Emkarate RL 32CF, Mobil EAL Artic 22CC										
	Volume of oil (l)	2 x 3,3	2 x 3,3	2 x 6,2	2 x 3,3	2 x 3,3	2 x 6,2	2 x 6,2	2 x 6,2	2 x 6,2	2 x 6,2	
Gas burner	Gas type	Natural or propane										
	Standard model	PCH-72					PCH-200					
	Max. heating capacity (kW)	73					197					
	Pressure drop (mm.a.c)	11,4	16,2	20,0	5,7	8,1	10,0	12,8	13,1	16,5	22,8	
Electrical features	Electrical power supply	400 V / III ph / 50 Hz (±10%)										
	Power supply	3 Wires + Ground										
Maximum absorbed current	Compressor(s) (A)	58,0	70,0	72,0	58,0	70,0	72,0	87,0	102,0	116,0	130,0	
	Outdoor fan(s) (A)	8,6	8,6	8,6	8,6	8,6	8,6	11,2	11,2	11,2	11,2	
	Indoor fan (A)	7,2	10,0	13,8	5,4	10,0	10,0	10,0	10,0	13,8	18,0	
	Control (A)	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	
	Total (A)	75,8	90,6	96,4	74,0	90,6	92,6	110,2	125,2	143,0	161,2	
Refrigerant	Type	R-410A										
	Global warming potential (GWP) ④	1.720										
	Charge (kg)	18,4	19,8	27,0	18,8	20,1	27,4	42,5	42,4	51,0	51,0	
Dimensions	Length (mm)	3.326				3.926			4.816			
	Width (mm)	2.205				2.205			2.205			
	Height (mm)	2.095				2.095			2.095			
Weight	(kg)	1.497	1.581	1.717	1.723	1.806	1.942	2.360	2.402	2.459	2.512	
Condensates output Ø		1 1/4" adaptor										

- ① Cooling capacity calculated in accordance with the UNE-EN-14511 standard given for indoor temperature conditions 27°C, 50% RH and 35°C outdoor temperature.  
 ② Heating capacity calculated in accordance with the UNE-EN-14511 standard given for indoor temperature conditions 20°C and 6°C WB outdoor temperature.  
 ③ Total power input by compressor and motorised fans under nominal conditions, calculated in accordance with the UNE-EN-14511 standard.  
 ④ Climatic warming potential of a kilogram of fluorinated greenhouse gas in relation to a kilogram of carbon dioxide over a period of 100 years.



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## CHARACTERISTICS OF THE GAS BURNER

Gas burner models		PCH-43		PCH-54		PCH-72		PCH-92		PCH-150		PCH-200	
		min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
EC Mark	(PIN)	0694BM3433											
Nominal heat capacity	(kW)	14,8	47,5	15,5	58,0	22,0	78,0	30,0	98,0	44,0	155,0	53,0	215,0
Nominal heat output	(kW)	15,5	44,8	16,3	54,0	23,1	73,2	31,5	93,4	46,3	145,0	55,7	197,0
Performance	(%)	105,0	94,3	105,0	93,1	105,0	93,8	105,0	95,3	105,2	93,5	105,1	91,6
Air flow	(m³/h)	2.600	8.000	3.100	9.500	4.200	13.500	5.400	16.500	8.500	40.000	11.500	40.000
Motor output	(kW)	0,07		0,09		2 x 0,09		2 x 0,07		0,4		0,4	
Maximum pressure applicable	(mm.a.c)	60											
Ø aspiration/discharge pipe	(mm)	80/80		80/80		100/100		100/100		130/130		130/130	
Available outlet pressure for smoke	(mm.a.c)	12		12		12		12		10		14	
G20 methane supply pressure	(mm.a.c)	200											
Consumption G20 (15°C 10,13 m.a.c.)	(m³/h)	1,57	5,03	1,64	6,14	2,66	9,45	3,18	10,37	4,66	16,40	5,61	22,75
G25 methane supply pressure	(mm.a.c)	250											
Consumption G25 (15°C 10,13 m.a.c.)	(m³/h)	1,79	5,75	1,88	7,03	2,66	9,45	3,63	11,87	5,41	19,07	6,52	26,45
G30 methane supply pressure	(mm.a.c)	300											
Consumption G30 (15°C 10,13 m.a.c.)	(kg/h)	0,95	3,05	0,99	3,72	1,41	5,00	1,92	6,28	2,83	9,97	3,41	13,84
G31 propane supply pressure	(mm.a.c)	370											
Consumption G31 (15°C 10,13 m.a.c.)	(kg/h)	0,94	3,00	0,98	3,67	1,39	4,93	1,90	6,20	2,79	9,83	3,36	13,63
Power supply voltage		230 V / I ph / 50 Hz											
Index of protection (IP)		IP4xD											
Inlet temperature limit	(°C)	+60°C to -15°C											

Note: Maximum air flow calculated for a  $\Delta T = 15^\circ\text{C}$  and minimum air flow calculated for a  $\Delta T = 50^\circ\text{C}$

### Gas type in accordance with the destination country:

Country	Category	Gas	Pressure (mm.a.c)	Gas	Pressure (mm.a.c)
Austria	I12H3B/P	G20	200	G30/G31	500
Belgium < 70 kW	I2E(S)B,I3P	G20/G25	200/250	G31	370
Belgium > 70 kW	I2E(R)B,I3P	G20/G25	200/250	G31	370
Switzerland	I12HH3B/P	G20	200	G30/G31	500
Germany	I12ELL3B/P	G20	200	G30/G31	500
Denmark, Finland, Greece, Sweden	I12H3B/P	G20	200	G30/G31	300
Spain, United Kingdom, Ireland, Portugal	I12H3P	G20	200	G31	370
Italy	I12H3B/P	G20	200	G30/G31	300
Russia	I12H3B/P	G20	200	--	--
France	I123SI3P	G20/G25	200/250	G31	370
Luxembourg	I12E3P	G20/G25	200	G31	370/500
Netherlands	I12L3B/P	G25	250	G30/G31	300
Norway	I12H3B/P	G20	200	G30/G31	300
Hungary	I12HS3B/P	G20/G25.1	250	G30/G31	300
Czech Republic	I12H3B/P	G20	200	G30/G31	300
Cyprus, Malta	I3B/P	--	--	G30/G31	300
Estonia, Lithuania, Latvia	I12H3B/P	G20	200	G30/G31	300
Iceland	I3P	--	--	G31	370
Slovakia	I12H3B/P	G20	200	G30/G31	300
Slovenia	I12H3B/P	G20	200	G30/G31	300
Bulgaria, Romania, Turkey	I12H3B7P	G20	200	G30/G31	300
Poland	I12E3B/P	G20/GZ350	200/130	G30/G31	360

### OPTIONS FOR THE OUTDOOR CIRCUIT

#### ■ Electronic axial fan

Space PG		241	321	361	242	322	362	420	485	540	600
Nominal air flow	(m <sup>3</sup> /h)	30.000	30.000	30.000	30.000	30.000	30.000	42.000	42.000	42.000	42.000
Max. available static pressure	(mm.a.c)	12,5									
Number		2						4			
Diameter	(mm)	2 x 800						2 x 630 + 2 x 800			
Output	(kW)	2 x 2,2						2 x 0,9 + 2 x 2,2			
Maximum speed	(r.p.m.)	980						1.000 / 980			
Maximum absorbed current	(A)	6,8						10,8			

#### ■ High-powered axial fan

Space PG		241	321	361	242	322	362	420	485	540	600
Nominal air flow	(m <sup>3</sup> /h)	30.000	30.000	30.000	30.000	30.000	30.000	42.000	42.000	42.000	42.000
Available static pressure	(mm.a.c)	7									
Number		2						4			
Diameter	(mm)	2 x 800						4 x 800			
Output	(kW)	2 x 2,2 / 1,5						4 x 2,0 / 1,3			
Speed	(r.p.m.)	910 / 720						895 / 705			
Maximum absorbed current	(A)	10,4						17,2			

### OPTIONS FOR THE INDOOR CIRCUIT

#### ■ Axial return fan (MA assembly)

Space PG		241	321	361	242	322	362	420	485	540	600
Maximum air flow	(m <sup>3</sup> /h)	12.000	12.400	12.400	12.000	12.400	12.400	18.000	18.200	20.400	24.000
Number		2						4			
Diameter	(mm)	450						500			
Power supply voltage		230 V / 1 ph / 50 Hz									
Output	(kW)	2 x 0,48						4 x 0,64			
Speed	(r.p.m.)	1.350						1.270			
Maximum absorbed current	(A)	4,2						12,0			

#### ■ Lower radial centrifugal return fan (MCO assembly)

Space PG		241	321	361	242	322	362	420	485	540	600
Nominal air flow	(m <sup>3</sup> /h)	12.000	14.300	14.600	12.000	14.300	14.600	18.000	18.200	20.400	24.000
Available static pressure	(mm.a.c)	17	10	7	17	10	7	21	21	19	17
Number		2						4			
Diameter	(mm)	2 x 500						4 x 500			
Output	(kW)	2,7 + 1,4						2 x (2,7 + 1,4)			
Speed	(r.p.m.)	1.700 / 1.375						2 x 1.700 / 2 x 1.375			
Maximum absorbed current	(A)	7,3						14,6			



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## SOUND LEVELS dB(A)

### ■ Sound power level

Space PG	241	321	361	242	322	362	420	485	540	600
20 Hz	31,0	31,5	32,0	31,0	31,5	32,0	34,1	34,6	37,2	37,7
25 Hz	31,2	34,3	34,9	31,2	34,3	34,9	37,0	37,7	39,8	39,8
31,5 Hz	34,8	38,1	38,6	34,8	38,1	38,6	40,8	41,6	44,0	43,5
40 Hz	39,6	43,3	43,8	39,6	43,3	43,8	47,5	47,7	48,6	49,6
50 Hz	51,3	59,3	59,6	51,3	59,3	59,6	66,5	67,3	64,8	65,5
63 Hz	57,1	56,1	57,1	57,1	56,1	57,1	59,7	60,7	62,0	62,2
80 Hz	73,6	69,9	70,0	73,6	69,9	70,0	70,4	70,9	76,2	76,3
100 Hz	58,2	64,2	64,3	58,0	64,2	64,3	66,5	66,5	69,9	70,5
125 Hz	62,6	61,5	62,2	62,6	61,5	62,2	70,4	71,6	66,7	67,1
160 Hz	75,5	72,0	73,1	75,1	72,0	73,1	81,4	81,7	77,6	77,1
200 Hz	70,6	72,5	72,9	70,5	72,5	72,9	80,6	81,2	77,7	78,6
250 Hz	74,9	74,1	74,7	73,9	72,9	74,4	81,6	81,6	80,1	79,9
315 Hz	75,2	75,9	76,8	74,1	74,7	76,5	82,1	83,2	80,6	81,0
400 Hz	78,1	78,6	79,9	77,0	77,4	78,7	83,7	84,1	84,7	84,7
500 Hz	79,9	79,6	81,2	78,9	78,4	80,0	83,4	84,9	85,4	85,5
630 Hz	79,7	79,7	81,0	78,6	78,1	79,3	84,5	85,2	84,6	84,5
800 Hz	80,4	81,1	81,2	79,3	78,7	79,6	84,7	85,4	85,8	86,1
1.000 Hz	82,2	81,2	82,2	80,2	79,8	81,0	85,9	86,7	86,0	86,4
1.250 Hz	79,8	80,2	81,9	78,7	79,0	80,4	83,2	84,3	85,7	85,7
1.600 Hz	76,2	77,1	77,8	75,0	75,9	76,9	80,8	81,8	82,3	82,0
2.000 Hz	75,9	76,3	77,4	74,9	75,5	76,6	79,1	80,3	81,5	81,8
2.500 Hz	73,6	73,8	74,4	72,4	73,6	74,0	77,0	78,6	79,4	79,4
3.150 Hz	71,9	72,0	72,7	70,9	71,8	72,3	75,1	76,5	77,9	78,0
4.000 Hz	70,6	70,2	70,9	69,4	70,1	70,5	72,2	72,5	75,6	75,8
5.000 Hz	67,9	68,0	68,8	67,8	68,0	68,6	69,6	69,9	73,7	74,0
6.300 Hz	64,2	65,8	66,5	64,0	65,8	66,4	68,0	68,3	71,9	71,3
8.000 Hz	61,2	62,4	63,1	61,0	62,4	63,1	64,7	64,8	68,2	68,9
10.000 Hz	57,9	59,9	60,5	57,9	59,9	60,5	60,1	60,7	66,2	65,8
12.500 Hz	52,9	58,0	58,6	52,9	58,0	58,6	53,9	54,1	64,2	64,0
16.000 Hz	47,2	55,9	56,3	47,2	55,9	56,3	48,2	48,8	61,6	61,7
20.000 Hz	39,3	50,4	50,9	39,3	50,4	50,9	41,2	41,9	56,0	56,0
Total dB(A)	90	90	91	88	88	89	94	95	95	95

### ■ Sound pressure level

Measurement conditions: in free field, measured at a distance of 5 metres, directivity 2 and at 1.5 metres from the ground.

Space PG	241	321	361	242	322	362	420	485	540	600
Total dB(A)	63	63	64	61	61	62	67	67	67	67

**Note:** The sound pressure level depends on the installation conditions and, as such, it only indicated as a guide. Values obtained according to the ISO 3744 standard.



# Air-air rooftop units with a built in gas burner

Space PG

## COOLING CAPACITY (kW)

Outdoor temperature 35°C

RPG IPG	Flow (m³/h)	Indoor air temperature																	
		20 °C / 50 % RH			23 °C / 50 % RH			25 °C / 50 % RH			27 °C / 50 % RH			29 °C / 50 % RH			31 °C / 50 % RH		
		Pft	Pfs	Pa	Pft	Pfs	Pa	Pft	Pfs	Pa	Pft	Pfs	Pa	Pft	Pfs	Pa	Pft	Pfs	Pa
241	9.600	49,0	39,0	15,6	52,7	40,2	15,9	55,2	40,8	16,2	58,0	41,5	16,4	60,8	42,0	16,7	63,5	42,5	17,0
	12.000	50,8	43,1	15,8	54,5	44,5	16,1	57,1	45,3	16,4	59,8	46,2	16,6	62,6	46,9	16,9	65,6	47,5	17,2
	14.400	52,1	46,9	15,9	55,9	48,5	16,2	58,6	49,6	16,5	61,3	50,5	16,8	64,1	51,4	17,0	67,0	52,3	17,3
321	11.440	60,5	48,8	21,1	65,0	50,2	21,5	68,2	51,1	21,8	71,5	51,9	22,2	75,0	52,6	22,5	78,4	53,2	22,9
	14.300	62,7	53,9	21,3	67,3	55,6	21,7	70,5	56,7	22,1	73,8	57,8	22,4	77,3	58,6	22,8	80,9	59,5	23,2
	17.160	64,4	58,7	21,4	69,0	60,7	21,9	72,3	62,0	22,3	75,7	63,2	22,6	79,1	64,3	23,0	82,7	65,4	23,4
361	12.720	69,8	55,2	24,8	75,0	56,8	25,3	78,7	57,7	25,7	82,5	58,6	26,1	86,5	59,4	26,4	90,4	60,1	27,0
	15.900	72,4	60,9	25,0	77,6	62,9	25,6	81,3	64,1	26,0	85,2	65,3	26,4	89,1	66,2	26,8	93,4	67,2	27,3
	19.080	74,2	66,3	25,2	79,5	68,6	25,8	83,4	70,1	26,2	87,3	71,5	26,6	91,3	72,7	27,0	95,4	73,9	27,5
242	9.600	49,9	39,8	15,7	53,6	41,0	16,0	56,2	41,6	16,3	59,0	42,3	16,5	61,8	42,9	16,7	64,6	43,4	17,0
	12.000	51,7	44,0	15,8	55,5	45,4	16,2	58,1	46,2	16,4	60,9	47,1	16,7	63,7	47,8	16,9	66,7	48,5	17,2
	14.400	53,1	47,8	16,0	56,8	49,5	16,3	59,6	50,6	16,6	62,4	51,6	16,8	65,2	52,5	17,1	68,1	53,3	17,4
322	11.440	61,2	49,4	21,2	65,8	50,8	21,6	69,0	51,6	21,9	72,4	52,5	22,3	75,9	53,2	22,6	79,4	53,8	23,0
	14.300	63,5	54,5	21,4	68,1	56,3	21,9	71,4	57,3	22,2	74,7	58,4	22,5	78,2	59,3	22,9	81,9	60,1	23,3
	17.160	65,2	59,3	21,5	69,8	61,4	22,0	73,2	62,7	22,4	76,6	63,9	22,7	80,1	65,1	23,1	83,7	66,1	23,5
362	12.720	70,8	55,8	24,9	76,1	57,4	25,4	79,8	58,4	25,8	83,7	59,3	26,2	87,7	60,2	26,6	91,7	60,8	27,1
	15.900	73,4	61,7	25,1	78,7	63,6	25,7	82,5	64,8	26,1	86,4	66,0	26,5	90,4	67,0	26,9	94,7	68,0	27,4
	19.080	75,3	67,1	25,3	80,7	69,4	25,9	84,6	70,9	26,3	88,5	72,3	26,7	92,6	73,6	27,1	96,7	74,7	27,6
420	14.400	84,5	65,9	25,6	90,8	67,9	26,1	95,2	69,0	26,5	99,9	70,1	27,0	104,7	71,0	27,3	109,5	71,8	27,8
	18.000	87,6	72,8	25,8	94,0	75,1	26,4	98,5	76,6	26,8	103,1	78,0	27,3	107,9	79,2	27,7	113,0	80,3	28,1
	21.600	89,9	79,2	26,1	96,3	82,0	26,6	100,9	83,8	27,1	105,7	85,4	27,5	110,5	86,9	27,9	115,4	88,3	28,4
485	14.560	91,6	69,2	29,2	98,5	71,3	29,9	103,3	72,4	30,3	108,3	73,6	30,8	113,6	74,6	31,2	118,7	75,4	31,8
	18.200	95,0	76,5	29,5	101,9	78,9	30,2	106,8	80,4	30,6	111,8	81,9	31,1	117,0	83,1	31,6	122,6	84,3	32,1
	21.840	97,5	83,2	29,8	104,4	86,1	30,4	109,5	88,0	30,9	114,6	89,7	31,4	119,8	91,2	31,9	125,2	92,7	32,4
540	16.320	102,7	78,4	34,3	110,4	80,7	35,0	115,7	82,0	35,5	121,4	83,3	36,1	127,3	84,5	36,6	133,0	85,4	37,3
	20.400	106,5	86,6	34,6	114,2	89,4	35,4	119,7	91,1	35,9	125,3	92,8	36,5	131,1	94,2	37,0	137,4	95,5	37,7
	24.480	109,2	94,2	34,9	117,0	97,5	35,7	122,7	99,6	36,2	128,4	101,6	36,8	134,3	103,3	37,4	140,3	105,0	38,0
600	19.200	113,4	88,9	39,3	121,9	91,3	40,2	127,9	92,8	40,8	134,2	94,2	41,4	140,6	95,4	42,1	147,3	96,5	42,8
	24.000	118,0	98,9	39,8	126,4	101,8	40,7	132,8	103,8	41,3	139,0	105,5	41,9	145,6	107,1	42,6	152,5	108,6	43,3
	28.800	120,8	108,0	40,2	129,9	111,8	41,0	136,2	114,1	41,6	142,5	116,3	42,3	149,2	118,3	43,0	156,1	120,1	43,7

Pft: Total cooling capacity in kW  
 Pfs: Sensitive cooling capacity in kW  
 Pa: Compressor power input in kW

### Correction coefficients due to variation in the outdoor temperature and relative humidity

Outdoor T.	12°C	15°C	20°C	25°C	30°C	35°C	40°C	43°C	46°C	48°C	Relative humidity	40%	50%	60%	70%	PFT = Pft x K1 x K4 PFS = Pfs x K2 x K5 PA = Pa x K3 x K6
Coefficient K1	1,218	1,195	1,151	1,104	1,054	1,000	0,945	0,911	0,878	0,857	Coefficient K4	0,953	1,000	1,049	1,098	
Coefficient K2	1,118	1,105	1,081	1,056	1,028	1,000	0,970	0,952	0,934	0,922	Coefficient K5	1,125	1,000	0,876	0,757	
Coefficient K3	0,622	0,671	0,749	0,830	0,913	1,000	1,091	1,149	1,205	1,243	Coefficient K6	0,986	1,000	1,017	1,033	





# Air-air rooftop units with a built in gas burner

## HEATING CAPACITY (kW)

Indoor temperature 20°C

IPG	Flow (m³/h)	Outdoor air temperature															
		-10°C WB		-5°C WB		-3°C WB		0°C WB		3°C WB		6°C WB		10°C WB		15°C WB	
		Pc	Pa	Pc	Pa	Pc	Pa	Pc	Pa	Pc	Pa	Pc	Pa	Pc	Pa	Pc	Pa
241	9.600	41,2	11,6	46,1	12,3	48,6	12,6	52,5	13,1	56,5	13,7	60,6	14,3	66,8	15,2	75,0	16,4
	12.000	41,3	11,2	46,3	11,7	48,9	12,0	53,0	12,5	57,0	13,0	61,3	13,5	67,7	14,2	76,2	15,3
	14.400	41,4	10,9	46,5	11,4	49,2	11,7	53,3	12,1	57,4	12,5	61,8	13,0	68,3	13,6	77,2	14,6
321	11.440	50,3	14,0	56,3	14,8	59,3	15,2	64,2	15,8	69,1	16,5	74,1	17,2	81,6	18,3	91,7	19,7
	14.300	50,5	13,5	56,6	14,2	59,8	14,5	64,7	15,1	69,6	15,6	74,9	16,3	82,7	17,2	93,2	18,4
	17.160	50,6	13,1	56,9	13,7	60,1	14,1	65,1	14,6	70,2	15,1	75,5	15,6	83,5	16,4	94,4	17,6
361	12.720	60,3	17,6	67,5	18,6	71,1	19,1	76,9	19,9	82,8	20,7	88,8	21,6	97,8	22,9	109,9	24,8
	15.900	60,5	16,9	67,9	17,8	71,6	18,2	77,6	18,9	83,4	19,6	89,8	20,4	99,2	21,6	111,7	23,2
	19.080	60,7	16,5	68,2	17,3	72,0	17,7	78,0	18,3	84,1	18,9	90,5	19,6	100,1	20,6	113,1	22,0
242	9.600	41,4	11,3	46,3	11,9	48,8	12,3	52,8	12,8	56,8	13,3	61,0	13,9	67,2	14,7	75,5	15,9
	12.000	41,6	10,9	46,6	11,4	49,2	11,7	53,3	12,2	57,3	12,6	61,7	13,1	68,1	13,9	76,7	14,9
	14.400	41,7	10,6	46,8	11,1	49,5	11,3	53,6	11,8	57,7	12,2	62,1	12,6	68,7	13,3	77,7	14,2
322	11.440	50,4	13,8	56,4	14,6	59,4	15,0	64,2	15,6	69,1	16,3	74,2	17,0	81,7	18,0	91,8	19,4
	14.300	50,5	13,3	56,7	14,0	59,8	14,3	64,8	14,9	69,7	15,4	75,0	16,0	82,8	16,9	93,3	18,2
	17.160	50,7	12,9	56,9	13,6	60,1	13,9	65,1	14,4	70,2	14,9	75,5	15,4	83,6	16,2	94,4	17,3
362	12.720	60,4	17,4	67,6	18,3	71,3	18,8	77,1	19,6	82,9	20,5	89,0	21,3	98,0	22,6	110,1	24,4
	15.900	60,7	16,7	68,0	17,5	71,8	18,0	77,7	18,7	83,6	19,4	90,0	20,1	99,3	21,3	111,9	22,8
	19.080	60,8	16,3	68,3	17,0	72,2	17,4	78,2	18,0	84,3	18,7	90,7	19,4	100,3	20,4	113,3	21,7
420	14.400	69,9	21,9	78,2	23,2	82,4	23,8	89,1	24,8	95,9	25,8	102,9	26,9	113,4	28,6	127,4	30,8
	18.000	70,2	21,1	78,7	22,1	83,0	22,7	89,9	23,6	96,7	24,5	104,1	25,4	114,9	26,9	129,4	28,8
	21.600	70,4	20,5	79,0	21,5	83,5	22,0	90,4	22,8	97,5	23,6	104,9	24,4	116,0	25,7	131,1	27,5
485	14.560	76,5	25,4	85,7	26,9	90,3	27,6	97,6	28,7	105,0	30,0	112,7	31,2	124,1	33,2	139,5	35,8
	18.200	76,8	24,5	86,1	25,7	90,9	26,3	98,5	27,4	105,9	28,4	114,0	29,5	125,8	31,2	141,8	33,5
	21.840	77,0	23,8	86,5	25,0	91,4	25,5	99,0	26,4	106,7	27,4	114,8	28,3	127,0	29,8	143,5	31,9
540	16.320	85,3	28,2	95,4	29,8	100,6	30,6	108,7	31,9	117,0	33,3	125,6	34,7	138,3	36,8	155,4	39,7
	20.400	85,6	27,1	96,0	28,5	101,3	29,2	109,7	30,4	118,0	31,5	127,0	32,7	140,2	34,6	157,9	37,1
	24.480	85,8	26,4	96,4	27,7	101,8	28,3	110,3	29,3	118,9	30,4	127,9	31,5	141,5	33,1	159,9	35,4
600	19.200	93,9	30,8	105,1	32,5	110,8	33,4	119,8	34,8	128,9	36,3	138,3	37,8	152,3	40,1	171,2	43,3
	24.000	94,3	29,6	105,7	31,1	111,6	31,9	120,8	33,1	129,9	34,4	139,9	35,7	154,4	37,7	174,0	40,5
	28.800	94,5	28,8	106,2	30,2	112,2	30,9	121,5	32,0	131,0	33,1	140,9	34,3	155,9	36,1	176,1	38,6

Pc: Total heating capacity in kW

Pa: Compressor power input in kW

### Correction coefficients due to indoor temperature variation

Indoor T.	10°C	11°C	13°C	15°C	17°C	19°C	20°C	21°C	23°C	25°C	27°C
Coefficient K1	1,032	1,029	1,024	1,016	1,010	1,003	1,000	0,996	0,989	0,981	0,974
Coefficient K2	0,830	0,847	0,880	0,913	0,947	0,982	1,000	1,018	1,056	1,094	1,132

$$PC = Pc \times K1$$

$$PA = Pa \times K2$$

### DIMENSIONS SCHEMES

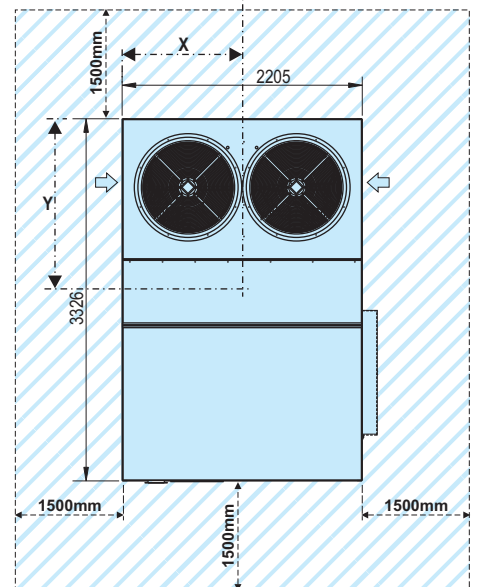
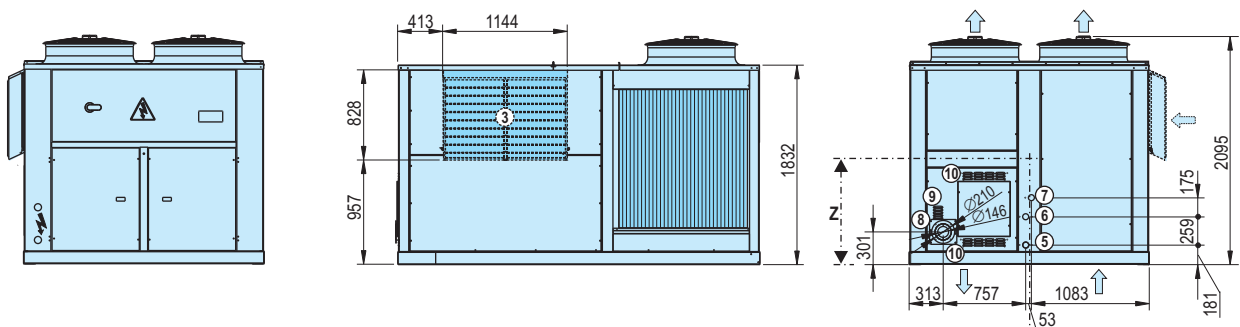
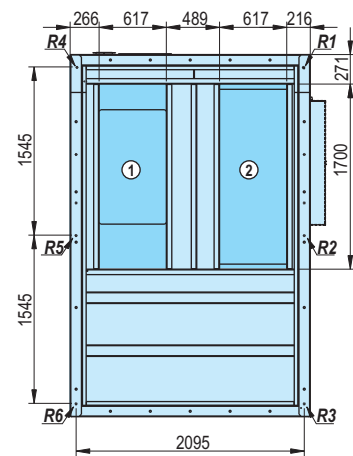
Space PG - 241, 321 and 361 assemblies MO and MS (mm)

**LEGEND**

- ➔ Outdoor air circulation
- ➔ Indoor air circulation
- ⚠ Electric panel
- ⚡ Electric power supply
- 🔑 Door switch
- ① Air outlet
- ② Air return
- ③ New air intake (optional)
- ⑤ Removal of condensates gas burner, threaded connector M 3/4"
- ⑥ Removal of condensates indoor circuit, trunk M1 1/4"
- ⑦ Gas burner power supply, trunk M1"
- ⑧ Burner flue connection (not supplied with the unit)
- ⑨ Air inlet to the burner
- ⑩ Grilles for the recirculation of outdoor air

Antivibration anchoring: rivet nut M12

Clear space to be observed for maintenance operations and unit start-up



Space PG	Assembly	Centre of gravity (mm)			Weight (kg)	Reactions in the supports (kg)					
		X	Y	Z		R1	R2	R3	R4	R5	R6
241	MO	1062	1310	830	1497	100	349	271	119	368	290
	MS	1127	1355	832	1578	133	384	290	121	372	278
321	MO	1062	1310	830	1581	105	369	286	126	389	306
	MS	1127	1355	832	1662	140	405	306	127	392	293
361	MO	1062	1310	830	1717	114	400	311	137	422	333
	MS	1127	1355	832	1798	152	438	331	137	424	317



# Air-air rooftop units with a built in gas burner

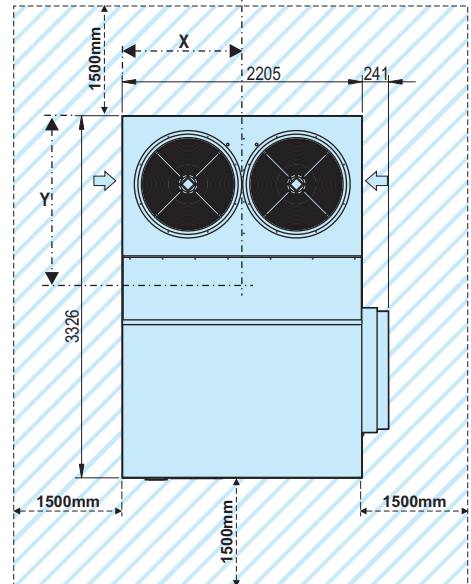
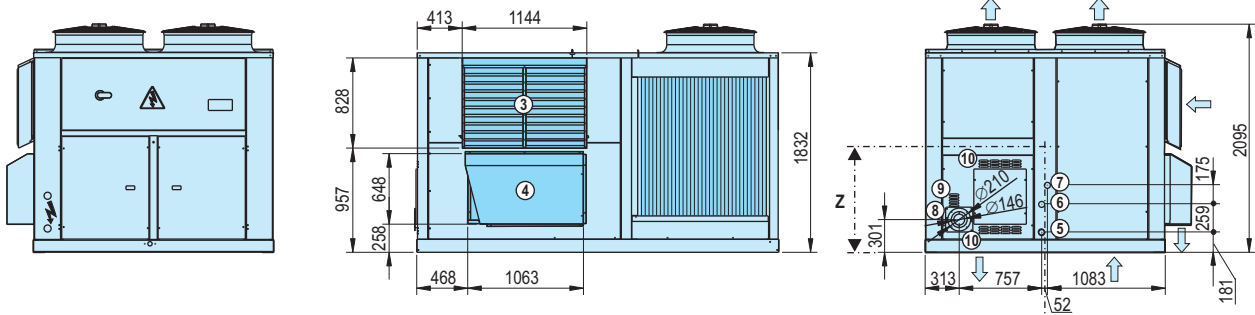
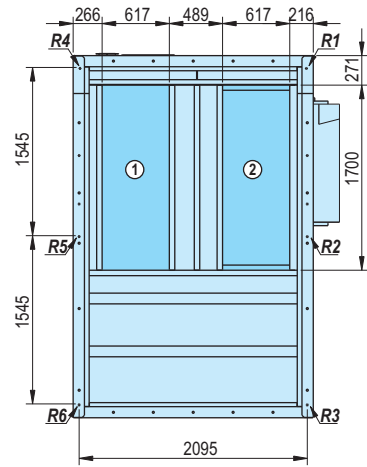
Space PG - 241, 321 and 361 assemblies MA and MC0 (mm)

**LEGEND**

- Outdoor air circulation
- Indoor air circulation
- Electric panel
- Electric power supply
- Door switch
- ① Air outlet
- ② Air return
- ③ New air intake
- ④ Air extraction intake
- ⑤ Removal of condensates gas burner, threaded connector M 3/4"
- ⑥ Removal of condensates indoor circuit, trunk M1 1/4"
- ⑦ Gas burner power supply, trunk M1"
- ⑧ Burner flue connection (not supplied with the unit)
- ⑨ Air inlet to the burner
- ⑩ Grilles for the recirculation of outdoor air

Antivibration anchoring: rivet nut M12

Clear space to be observed for maintenance operations and unit start-up

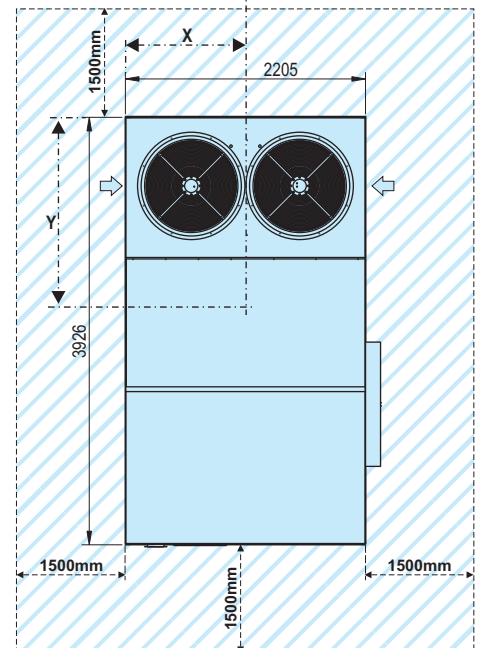
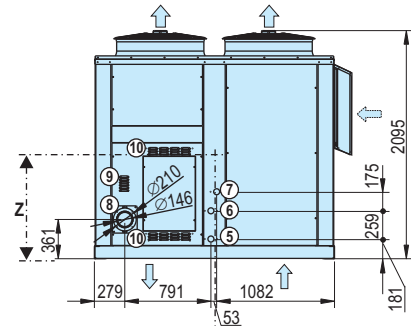
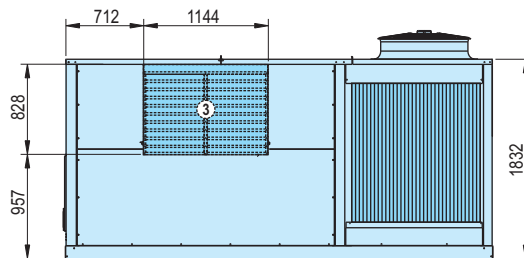
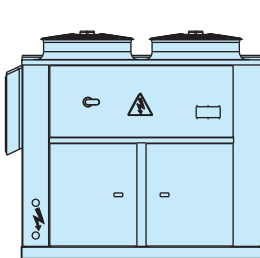
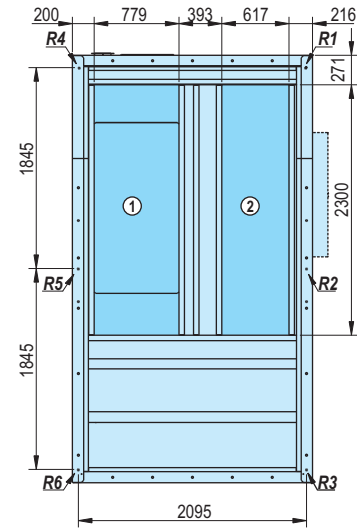


Space PG	Assembly	Centre of gravity (mm)			Weight (kg)	Reactions in the supports (kg)					
		X	Y	Z		R1	R2	R3	R4	R5	R6
241	MA / MC0	1193	1385	804	1705	170	433	323	121	384	274
321	MA / MC0	1193	1385	804	1789	178	454	339	127	403	288
361	MA / MC0	1193	1385	804	1925	192	489	365	136	433	310

Space PG - 242, 322 and 362 assemblies MO and MS (mm)

### LEGEND

- Outdoor air circulation
  - Indoor air circulation
  - Electric panel
  - Electric power supply
  - Door switch
  - ① Air outlet
  - ② Air return
  - ③ New air intake (optional)
  - ⑤ Removal of condensates gas burner, threaded connector M 3/4"
  - ⑥ Removal of condensates indoor circuit, trunk M1 1/4"
  - ⑦ Gas burner power supply, trunk M1"
  - ⑧ Burner flue connection (not supplied with the unit)
  - ⑨ Air inlet to the burner
  - ⑩ Grilles for the recirculation of outdoor air
- Antivibration anchoring: rivet nut M12
- Clear space to be observed for maintenance operations and unit start-up



Space PG	Assembly	Centre of gravity (mm)			Weight (kg)	Reactions in the supports (kg)					
		X	Y	Z		R1	R2	R3	R4	R5	R6
242	MO	1100	1300	845	1723	69	412	378	70	413	380
	MS	1165	1345	847	1805	102	450	404	66	414	368
322	MO	1100	1300	845	1806	72	432	397	74	433	398
	MS	1165	1345	847	1888	107	471	423	69	434	385
362	MO	1100	1300	845	1942	78	464	427	79	466	428
	MS	1165	1345	847	2024	114	505	453	74	465	413

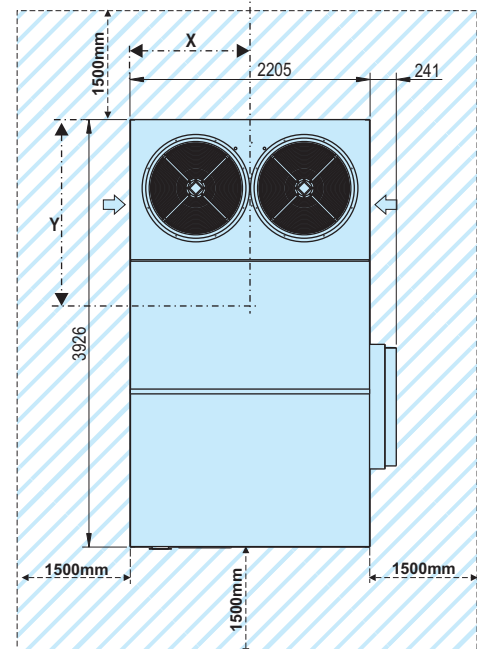
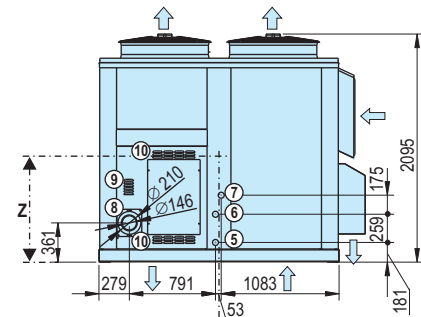
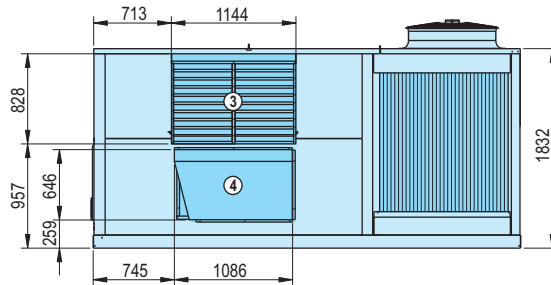
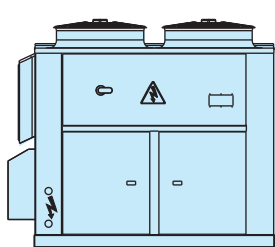
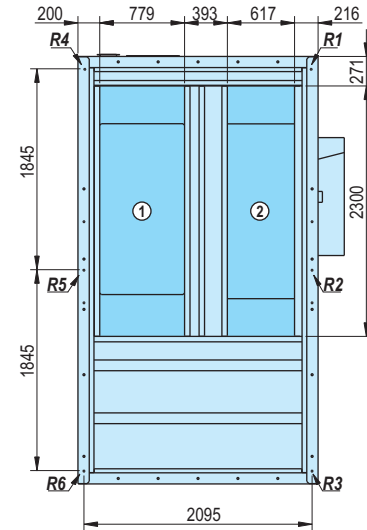


# Air-air rooftop units with a built in gas burner

Space PG - 242, 322 and 362 assemblies MA and MC0 (mm)

### LEGEND

- Outdoor air circulation
  - Indoor air circulation
  - Electric panel
  - Electric power supply
  - Door switch
  - ① Air outlet
  - ② Air return
  - ③ New air intake
  - ④ Air extraction intake
  - ⑤ Removal of condensates gas burner, threaded connector M 3/4"
  - ⑥ Removal of condensates indoor circuit, trunk M1 1/4"
  - ⑦ Gas burner power supply, trunk M1"
  - ⑧ Burner flue connection (not supplied with the unit)
  - ⑨ Air inlet to the burner
  - ⑩ Grilles for the recirculation of outdoor air
- Antivibration anchoring: rivet nut M12
- Clear space to be observed for maintenance operations and unit start-up



Space PG	Assembly	Centre of gravity (mm)			Weight (kg)	Reactions in the supports (kg)					
		X	Y	Z		R1	R2	R3	R4	R5	R6
242	MA / MC0	1223	1386	776	1925	137	498	438	63	424	364
322	MA / MC0	1223	1386	776	2008	143	520	457	66	443	380
362	MA / MC0	1223	1386	776	2144	153	555	488	70	473	406



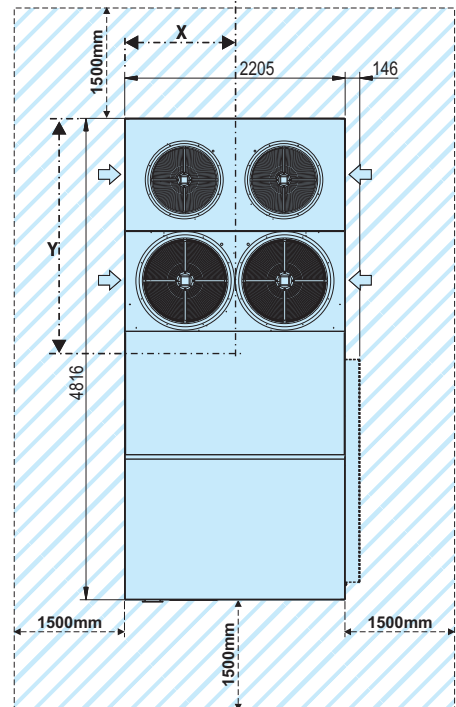
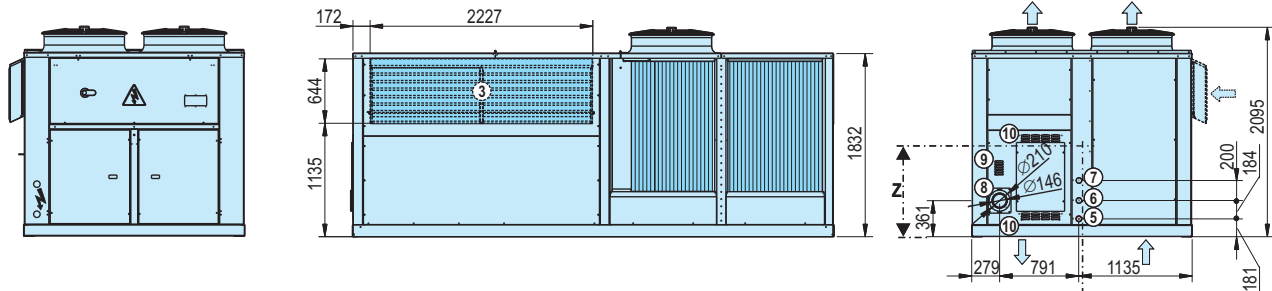
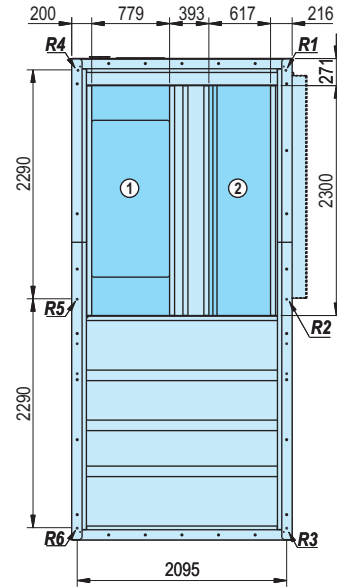
# Air-air rooftop units with a built in gas burner

## Space PG

Space PG - 420, 485, 540 and 600 assemblies MO and MS (mm)

### LEGEND

- Outdoor air circulation
  - Indoor air circulation
  - Electric panel
  - Electric power supply
  - Door switch
  - ① Air outlet
  - ② Air return
  - ③ New air intake (optional)
  - ⑤ Removal of condensates gas burner, threaded connector M 3/4"
  - ⑥ Removal of condensates indoor circuit, trunk M1 1/4"
  - ⑦ Gas burner power supply, trunk M1"
  - ⑧ Burner flue connection (not supplied with the unit)
  - ⑨ Air inlet to the burner
  - ⑩ Grilles for the recirculation of outdoor air
- Antivibration anchoring: rivet nut M12
- Clear space to be observed for maintenance operations and unit start-up



Space PG	Assembly	Centre of gravity (mm)			Weight (kg)	Reactions in the supports (kg)					
		X	Y	Z		R1	R2	R3	R4	R5	R6
420	M0	1024	2300	794	2360	250	536	306	309	595	365
	MS	1085	2353	804	2458	298	582	328	312	596	342
485	M0	1024	2300	794	2402	254	545	311	314	605	371
	MS	1085	2353	804	2500	304	592	334	317	606	347
540	M0	1024	2300	794	2459	260	558	318	322	620	380
	MS	1085	2353	804	2557	310	605	341	325	620	355
600	M0	1024	2300	794	2512	266	570	325	329	633	388
	MS	1085	2353	804	2610	317	618	348	331	633	363

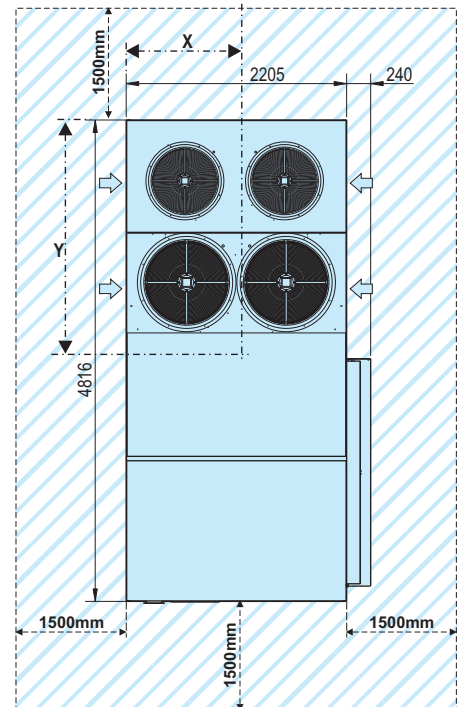
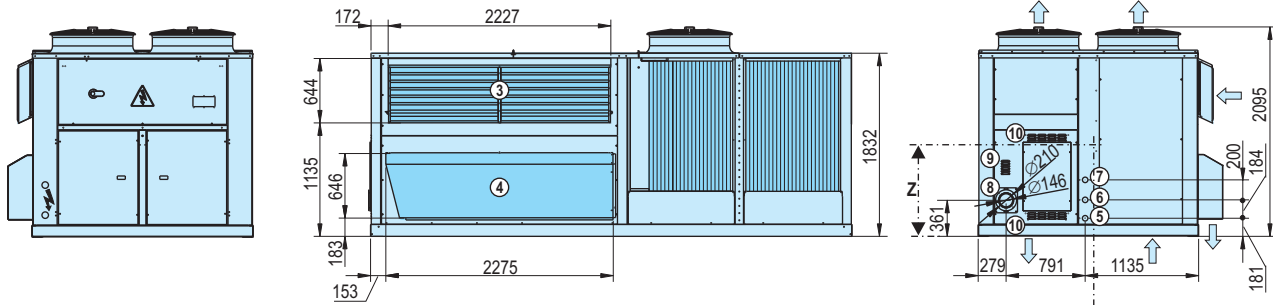
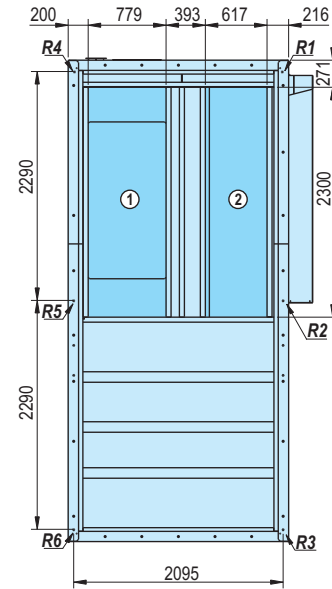


# Air-air rooftop units with a built in gas burner

Space PG - 420, 485, 540 and 600 assemblies MA and MC0 (mm)

### LEGEND

- Outdoor air circulation
  - Indoor air circulation
  - Electric panel
  - Electric power supply
  - Door switch
  - ① Air outlet
  - ② Air return
  - ③ New air intake
  - ④ Air extraction intake
  - ⑤ Removal of condensates gas burner, threaded connector M 3/4"
  - ⑥ Removal of condensates indoor circuit, trunk M1 1/4"
  - ⑦ Gas burner power supply, trunk M1"
  - ⑧ Burner flue connection (not supplied with the unit)
  - ⑨ Air inlet to the burner
  - ⑩ Grilles for the recirculation of outdoor air
- Antivibration anchoring: rivet nut M12
- Clear space to be observed for maintenance operations and unit start-up



Space PG	Assembly	Centre of gravity (mm)			Weight (kg)	Reactions in the supports (kg)					
		X	Y	Z		R1	R2	R3	R4	R5	R6
420	MA / MC0	1186	2469	746	2724	409	689	373	337	616	300
485	MA / MC0	1186	2469	746	2766	415	699	378	342	626	305
540	MA / MC0	1186	2469	746	2823	424	714	386	349	639	311
600	MA / MC0	1186	2469	746	2876	432	727	394	355	651	317

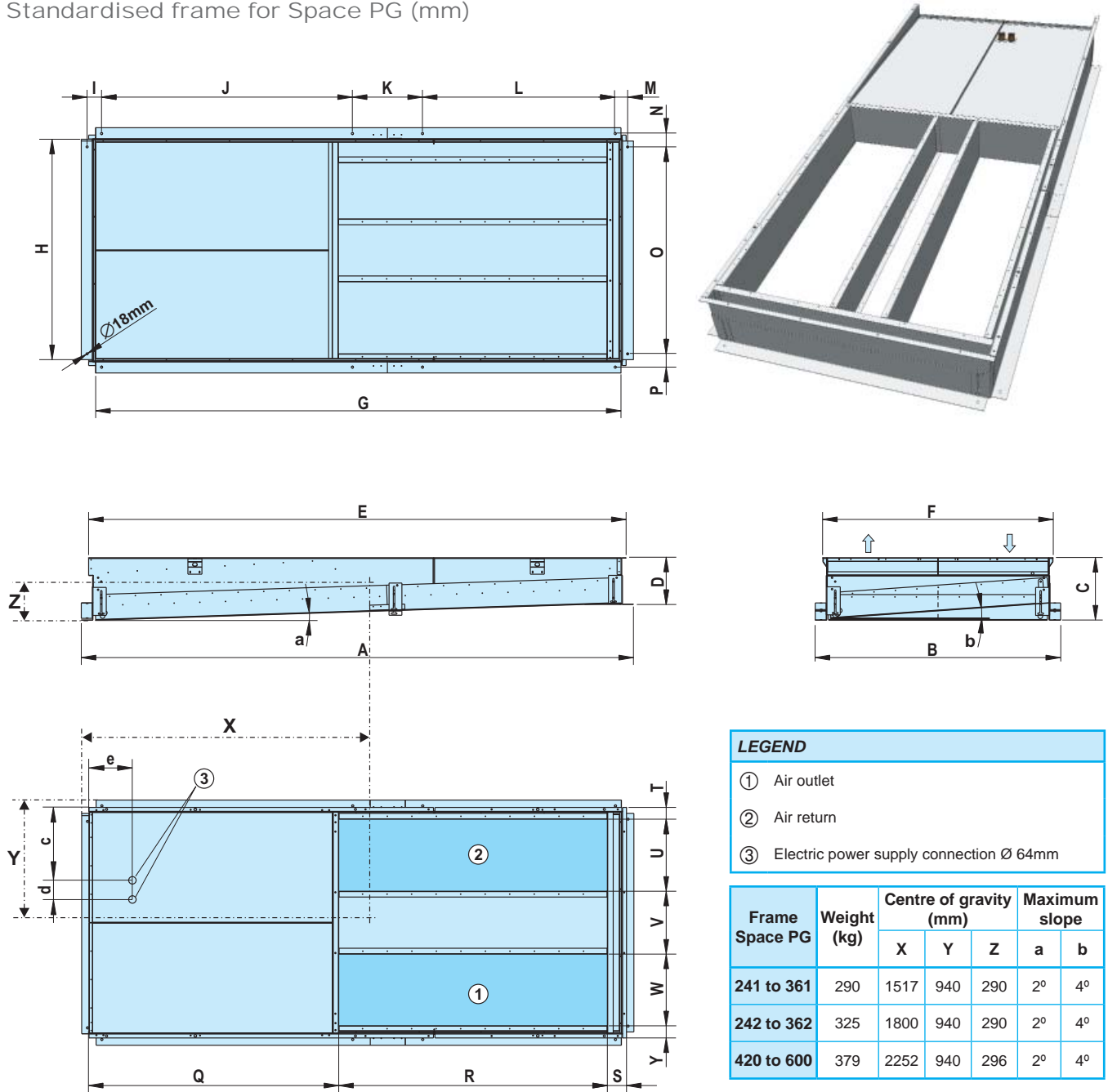


# Air-air rooftop units with a built in gas burner

## Space PG

### PRE-ASSEMBLY FRAMES (OPTIONAL)

Standardised frame for Space PG (mm)



LEGEND	
①	Air outlet
②	Air return
③	Electric power supply connection Ø 64mm

Frame Space PG	Weight (kg)	Centre of gravity (mm)			Maximum slope	
		X	Y	Z	a	b
241 to 361	290	1517	940	290	2°	4°
242 to 362	325	1800	940	290	2°	4°
420 to 600	379	2252	940	296	2°	4°

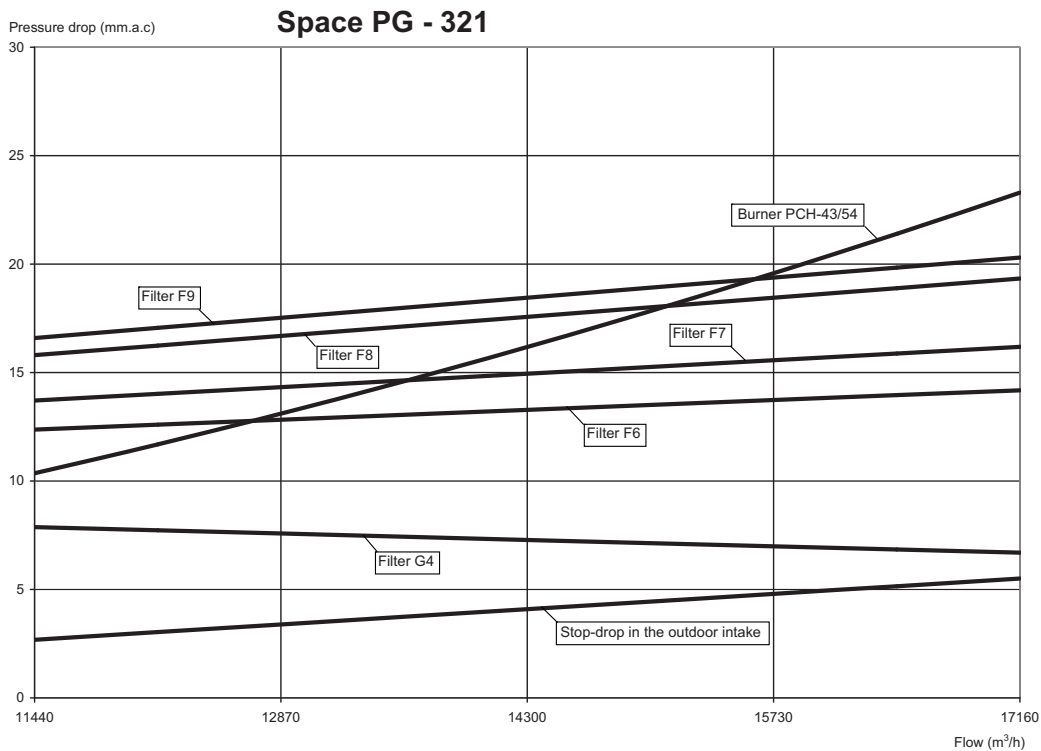
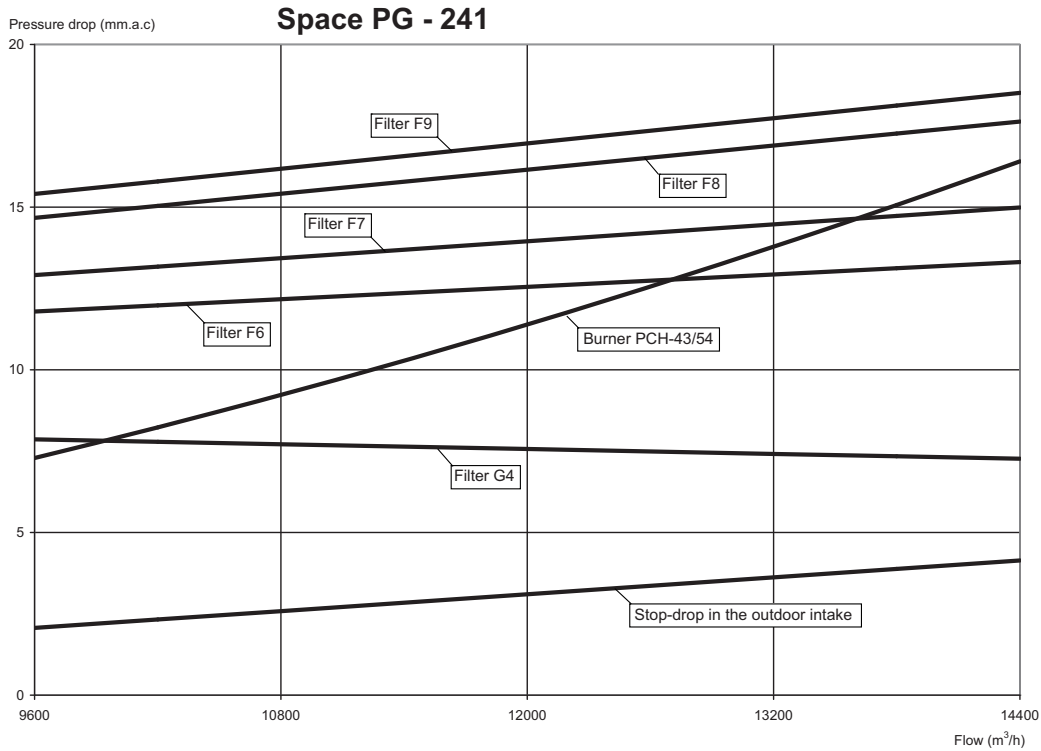
Space PG	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Y	c	d	e
241 to 361	3238	2101	536	400	3112	1975	3007	1873	128	2146	0	760	103	114	1773	114	1248	1700	164	101	617	489	617	151	818	100	413
242 to 362	3838	2101	536	400	3712	1975	3607	1873	126	2147	600	760	105	114	1773	114	1248	2300	164	97	617	393	779	81	818	100	413
420 to 600	4728	2101	536	400	4602	1975	4498	1873	123	2148	600	1650	107	114	1773	114	2138	2300	164	101	617	393	779	85	818	100	415





# Air-air rooftop units with a built in gas burner

## PRESSURE DROPS IN THE AVAILABLE OPTIONS



**Note:** pressure drops in the filters have been calculated for an average level of clogging.

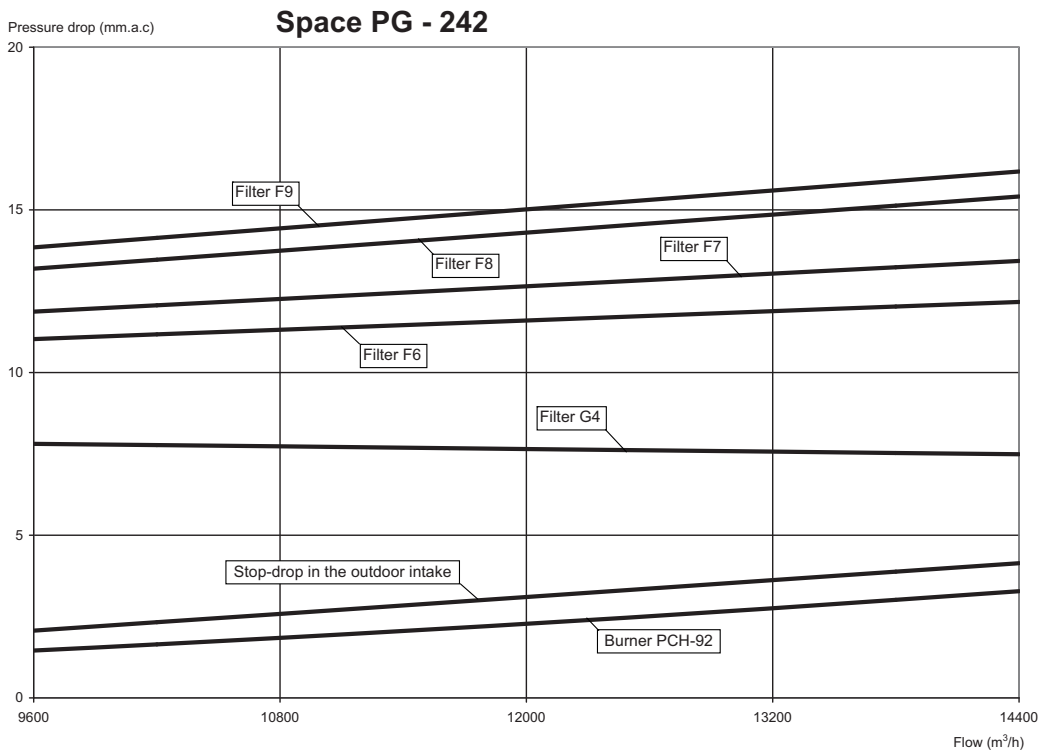
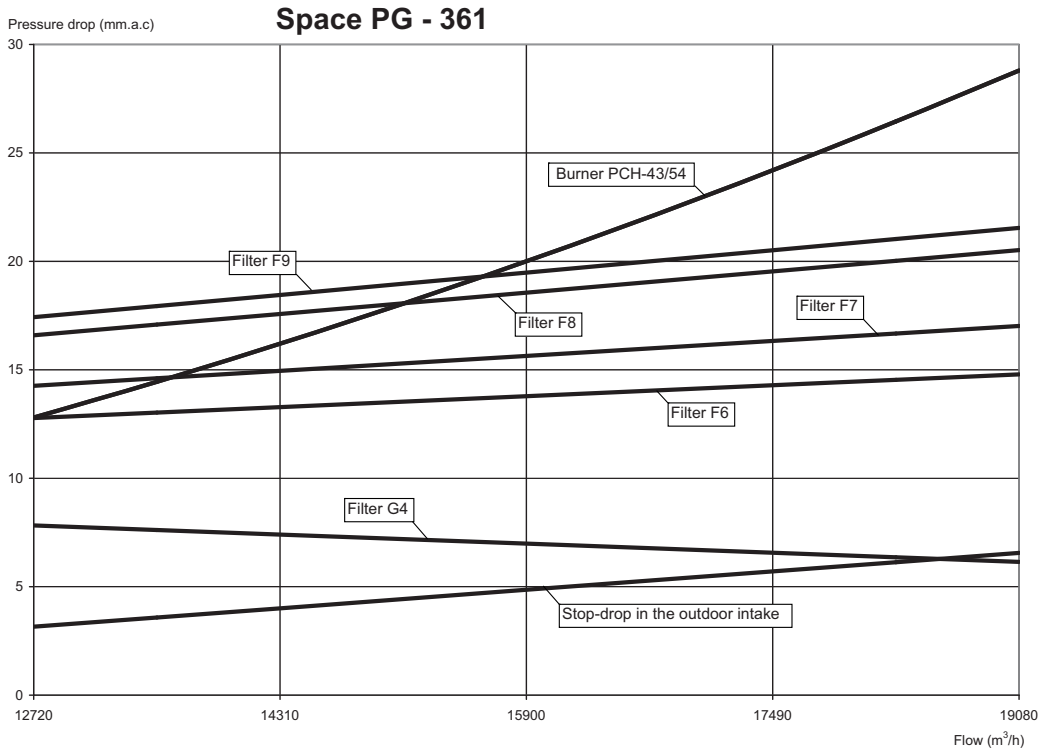
**Note:** the pressure drops in the burners which appear in the diagrams are actually increases or decreases with regard to the standard burner.



# Air-air rooftop units with a built in gas burner

## Space PG

### PRESSURE DROPS IN THE AVAILABLE OPTIONS



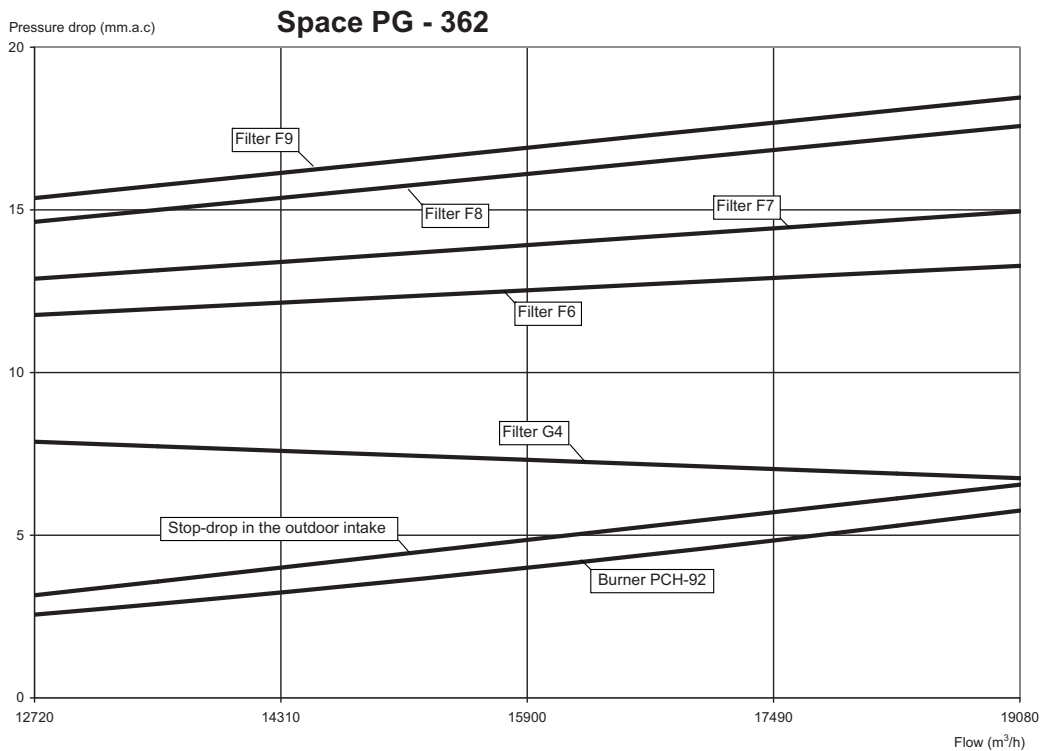
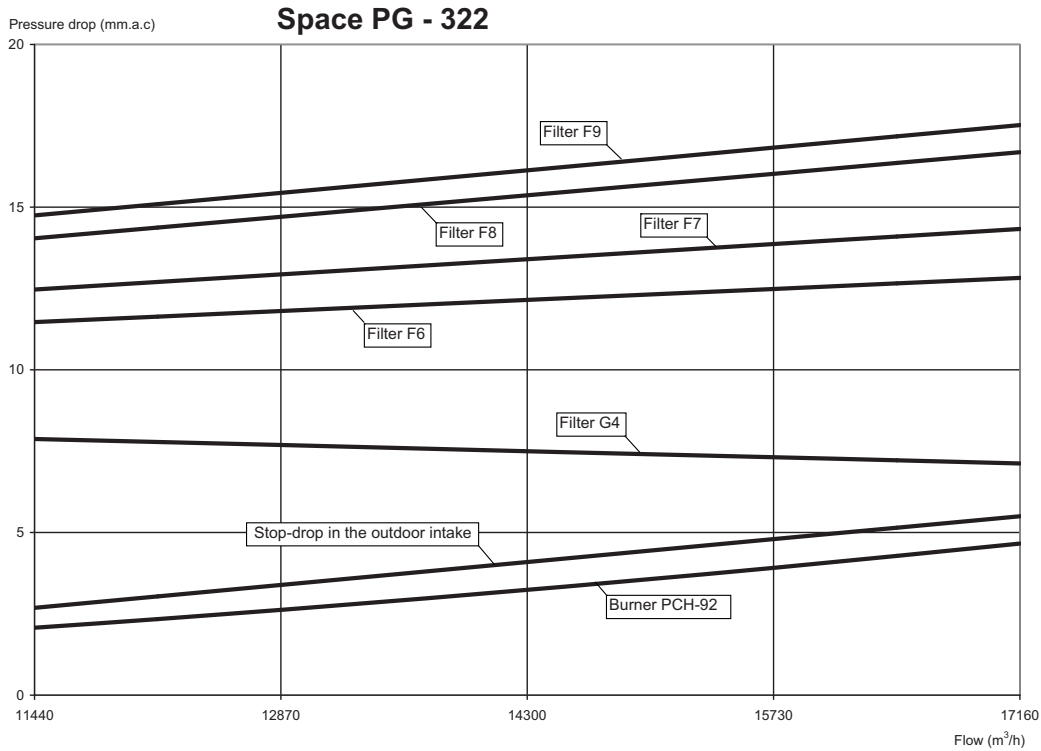
**Note:** pressure drops in the filters have been calculated for an average level of clogging.

**Note:** the pressure drops in the burners which appear in the diagrams are actually increases or decreases with regard to the standard burner.



# Air-air rooftop units with a built in gas burner

## PRESSURE DROPS IN THE AVAILABLE OPTIONS



**Note:** pressure drops in the filters have been calculated for an average level of clogging.

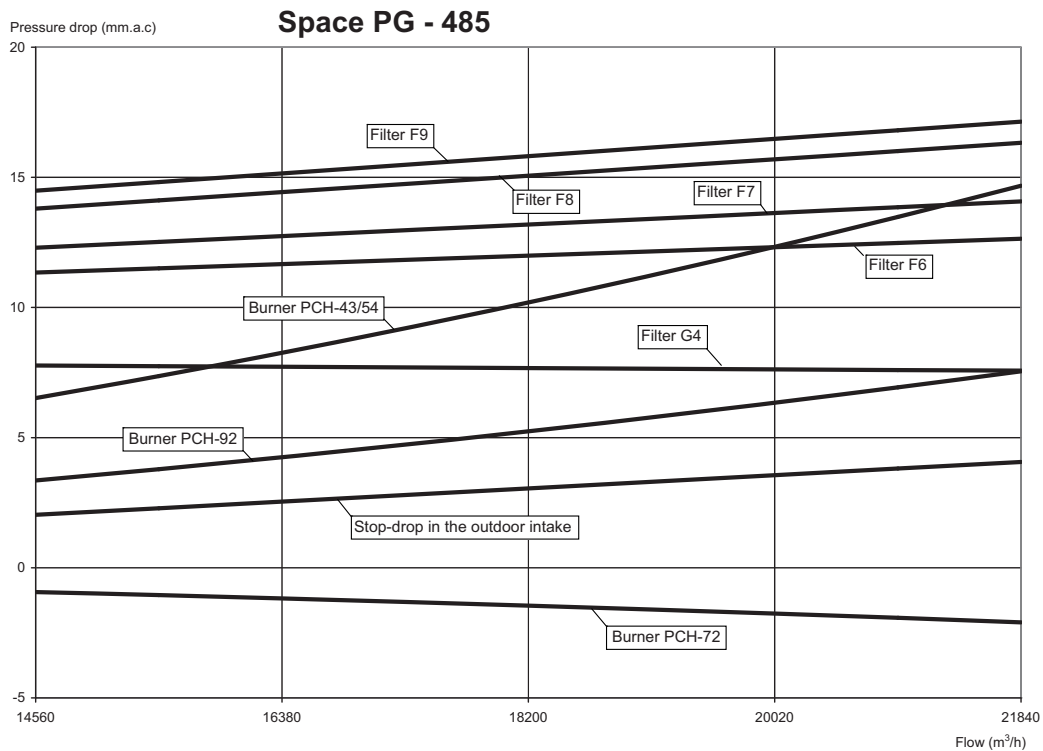
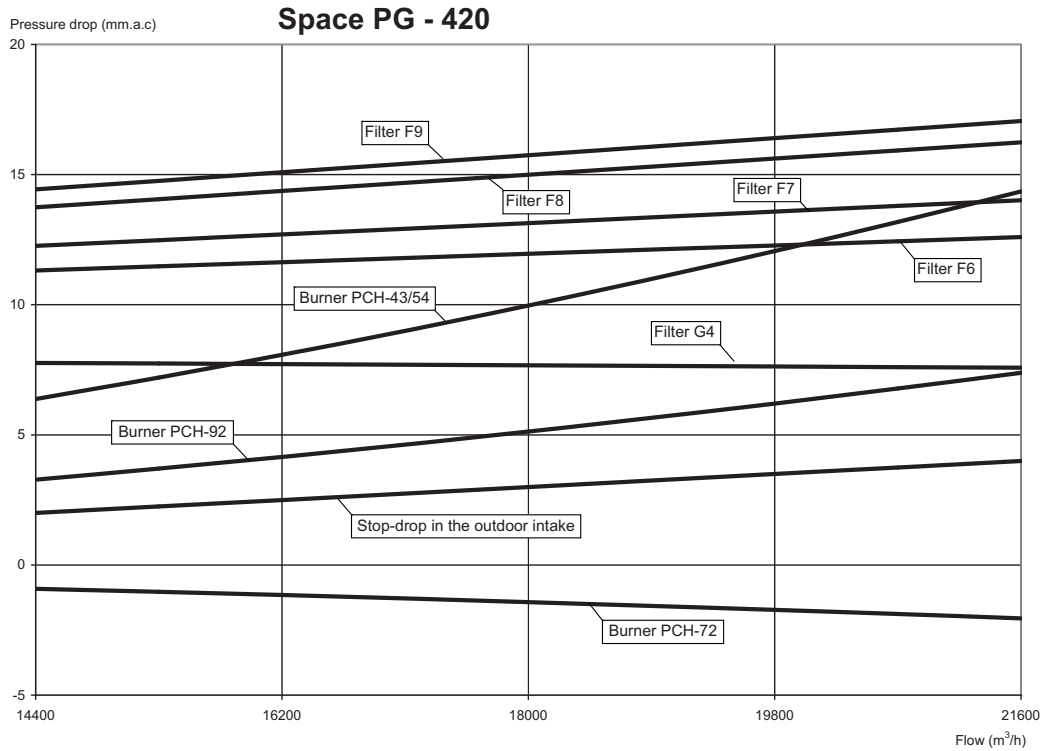
**Note:** the pressure drops in the burners which appear in the diagrams are actually increases or decreases with regard to the standard burner.



# Air-air rooftop units with a built in gas burner

## Space PG

### PRESSURE DROPS IN THE AVAILABLE OPTIONS



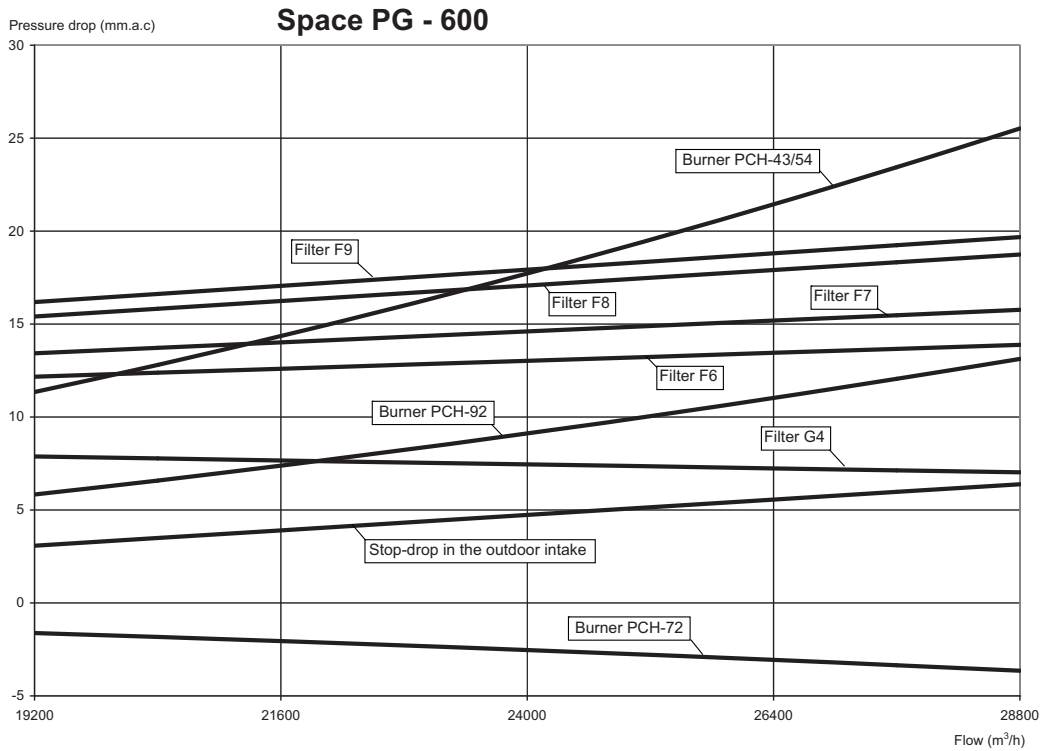
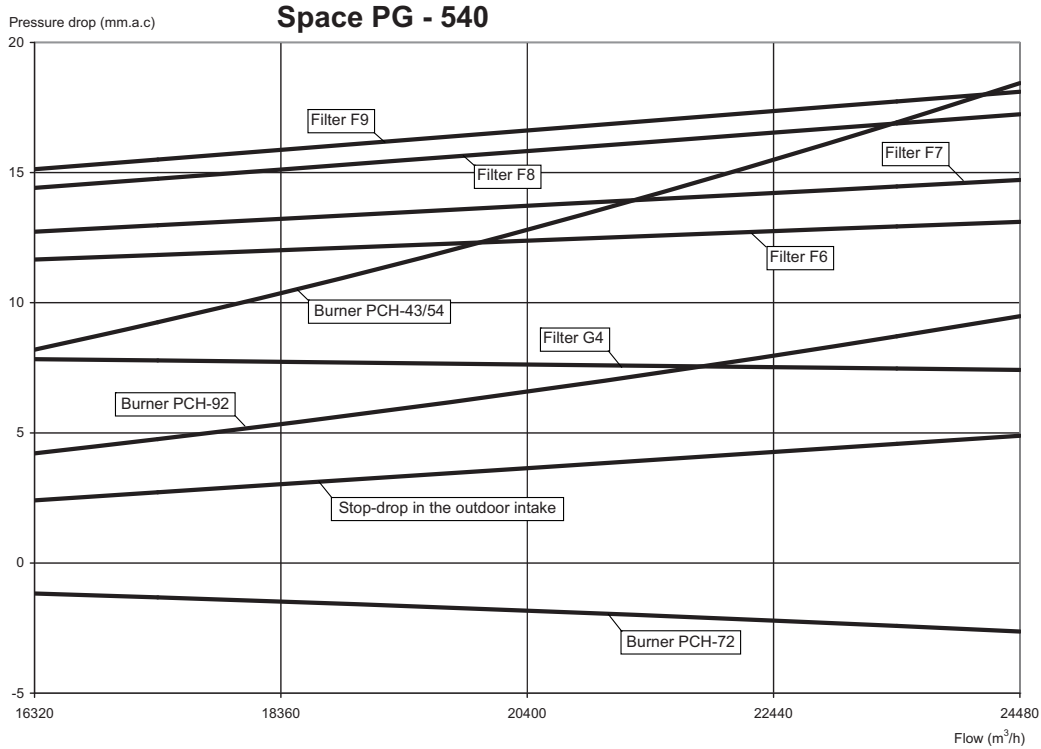
**Note:** pressure drops in the filters have been calculated for an average level of clogging.

**Note:** the pressure drops in the burners which appear in the diagrams are actually increases or decreases with regard to the standard burner.



# Air-air rooftop units with a built in gas burner

## PRESSURE DROPS IN THE AVAILABLE OPTIONS



**Note:** pressure drops in the filters have been calculated for an average level of clogging.

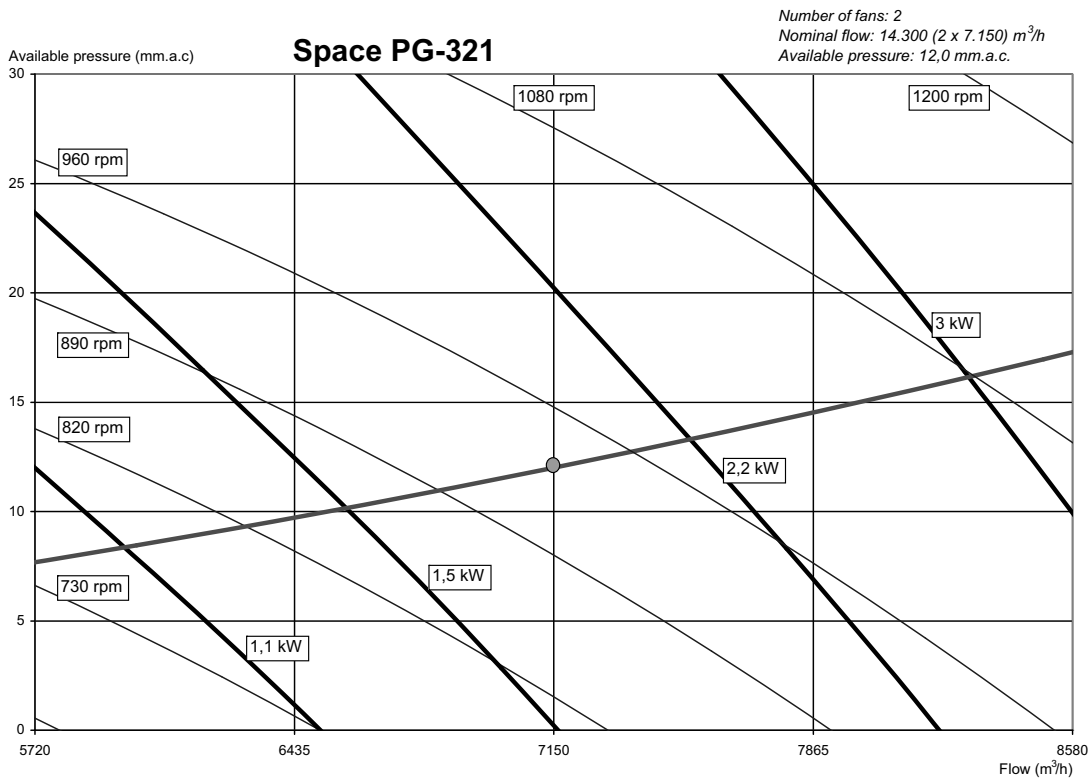
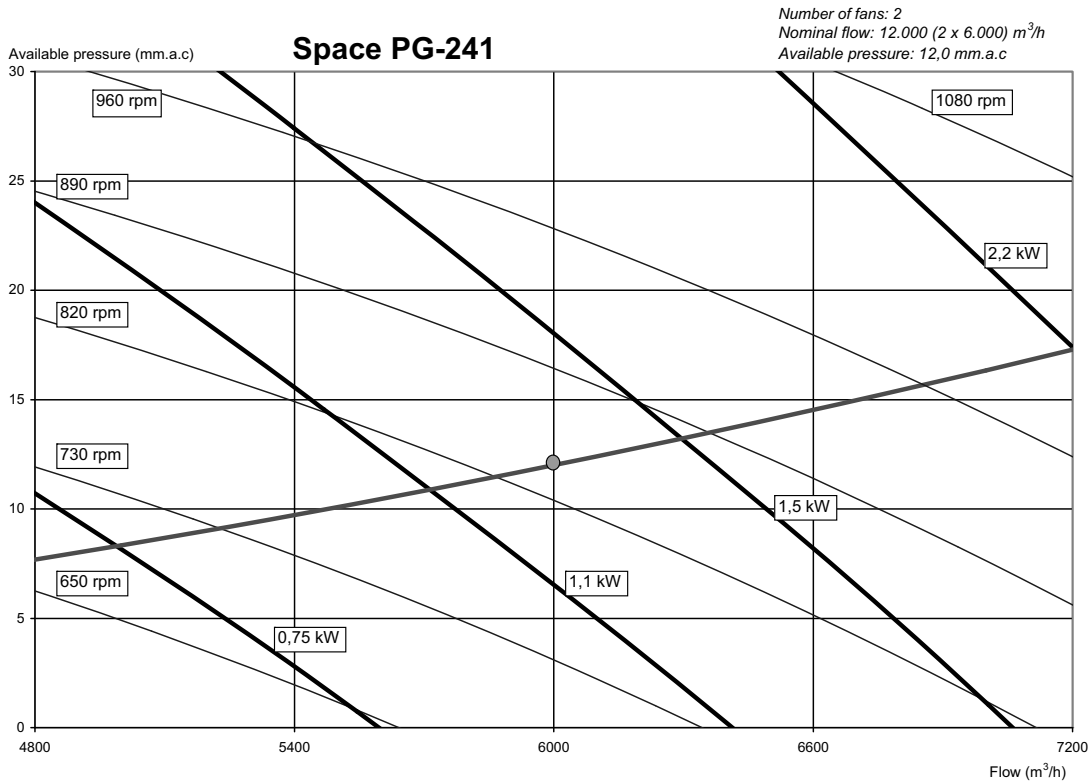
**Note:** the pressure drops in the burners which appear in the diagrams are actually increases or decreases with regard to the standard burner.



# Air-air rooftop units with a built in gas burner

## Space PG

### STANDARD OUTLET FAN



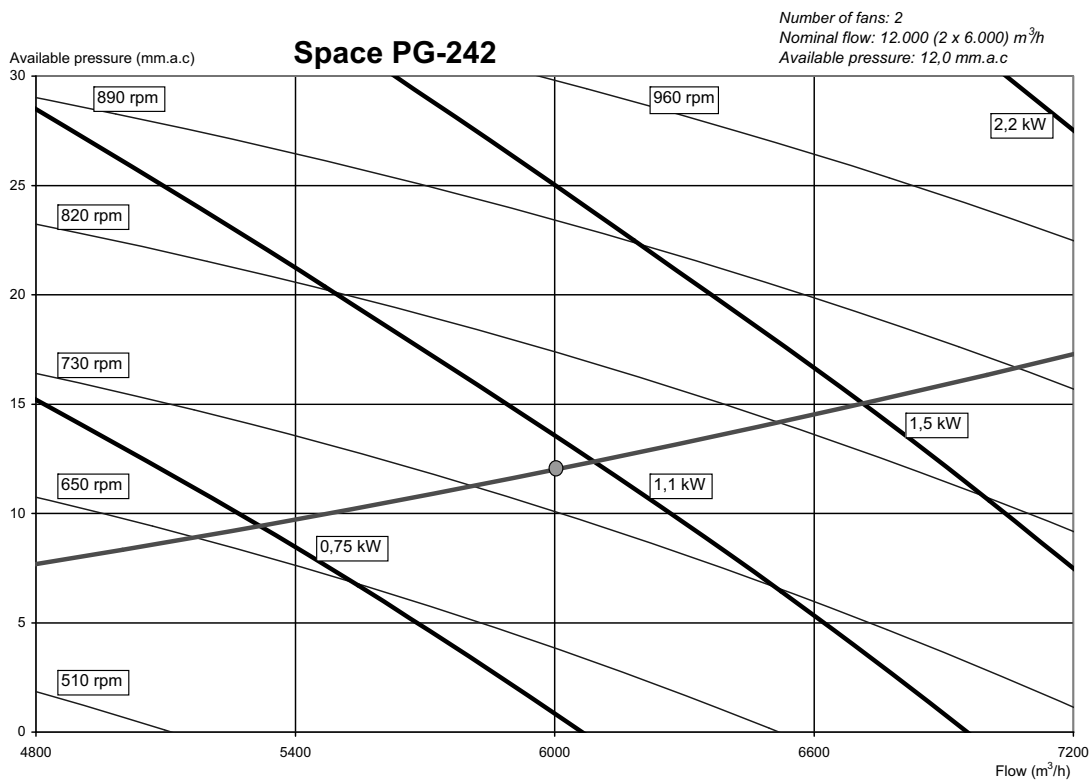
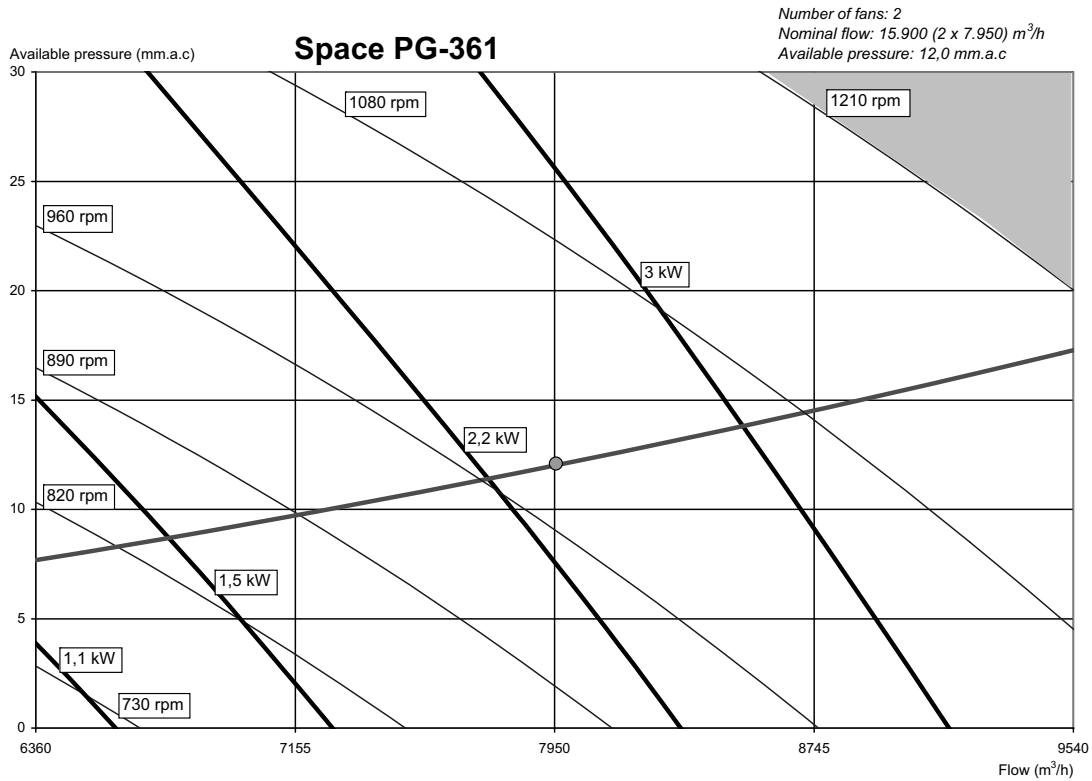
**Note:** the dot featured on the chart indicates the nominal operating point. The bend that goes through this point is the nominal installation bend (this bend gives an indication of the appearance of other possible installation bends).  
The motor to be selected is the one whose bend is located above the operating point.



# Air-air rooftop units with a built in gas burner

## STANDARD OUTLET FAN

Space PG



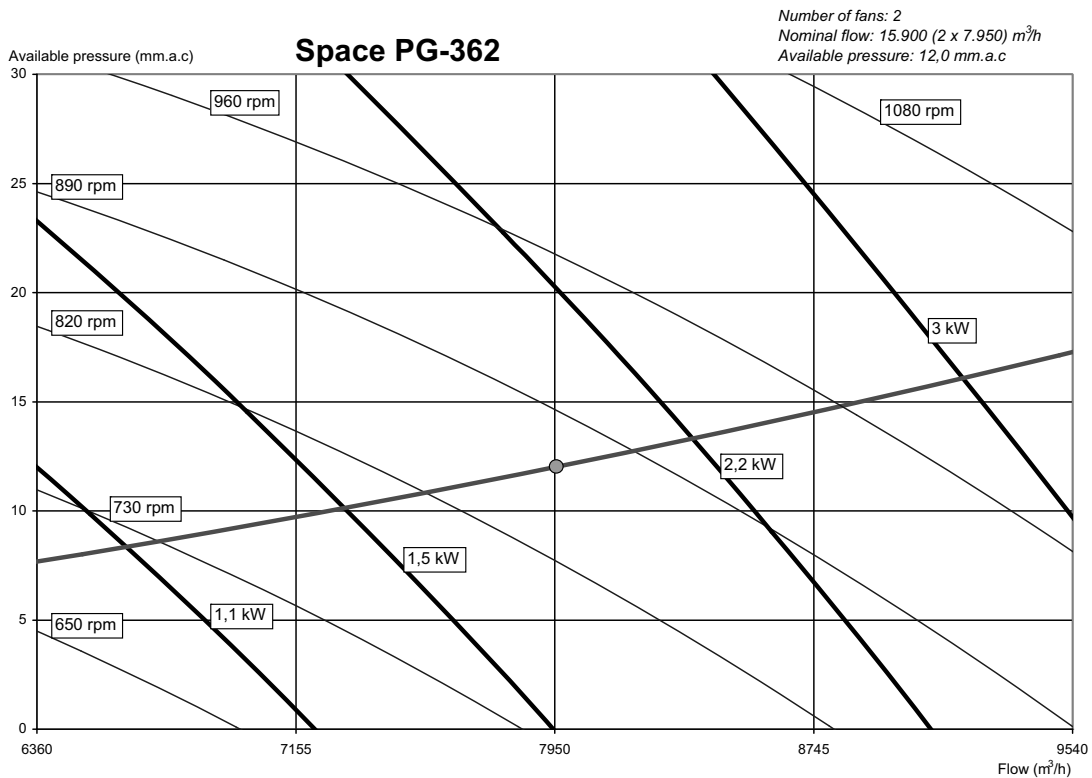
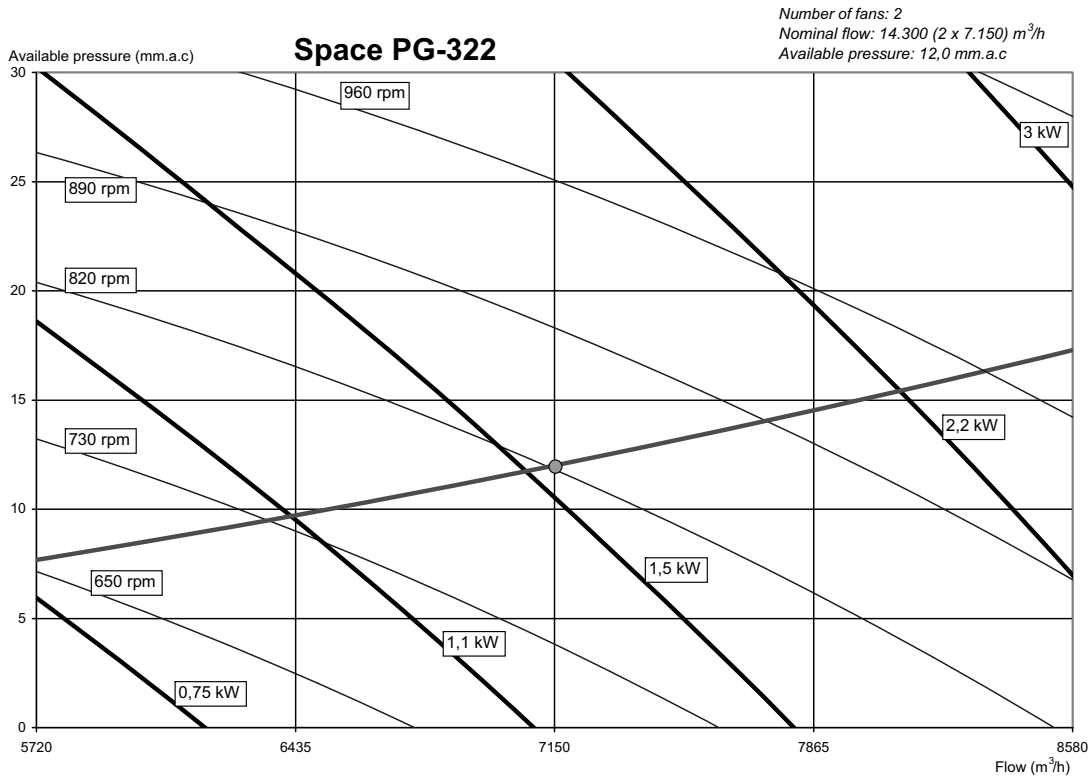
**Note:** the dot featured on the chart indicates the nominal operating point. The bend that goes through this point is the nominal installation bend (this bend gives an indication of the appearance of other possible installation bends).  
The motor to be selected is the one whose bend is located above the operating point.



# Air-air rooftop units with a built in gas burner

## Space PG

### STANDARD OUTLET FAN



**Note:** the dot featured on the chart indicates the nominal operating point. The bend that goes through this point is the nominal installation bend (this bend gives an indication of the appearance of other possible installation bends).  
The motor to be selected is the one whose bend is located above the operating point.

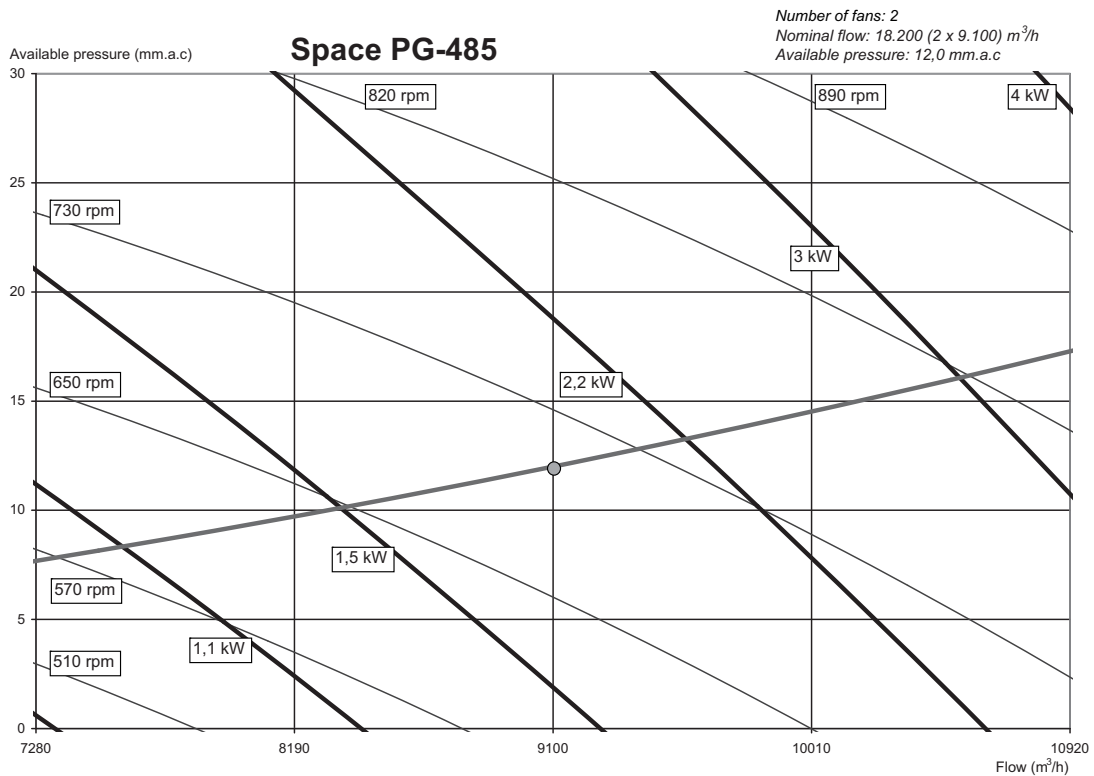
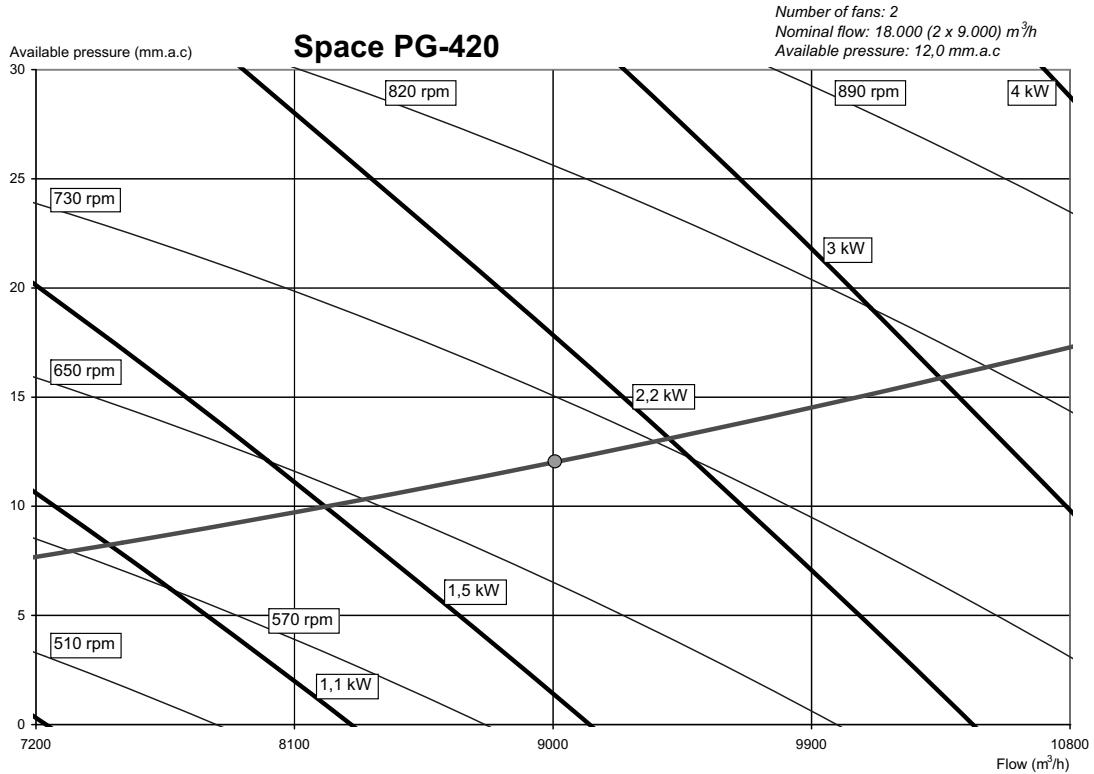




# Air-air rooftop units with a built in gas burner

## STANDARD OUTLET FAN

Space PG



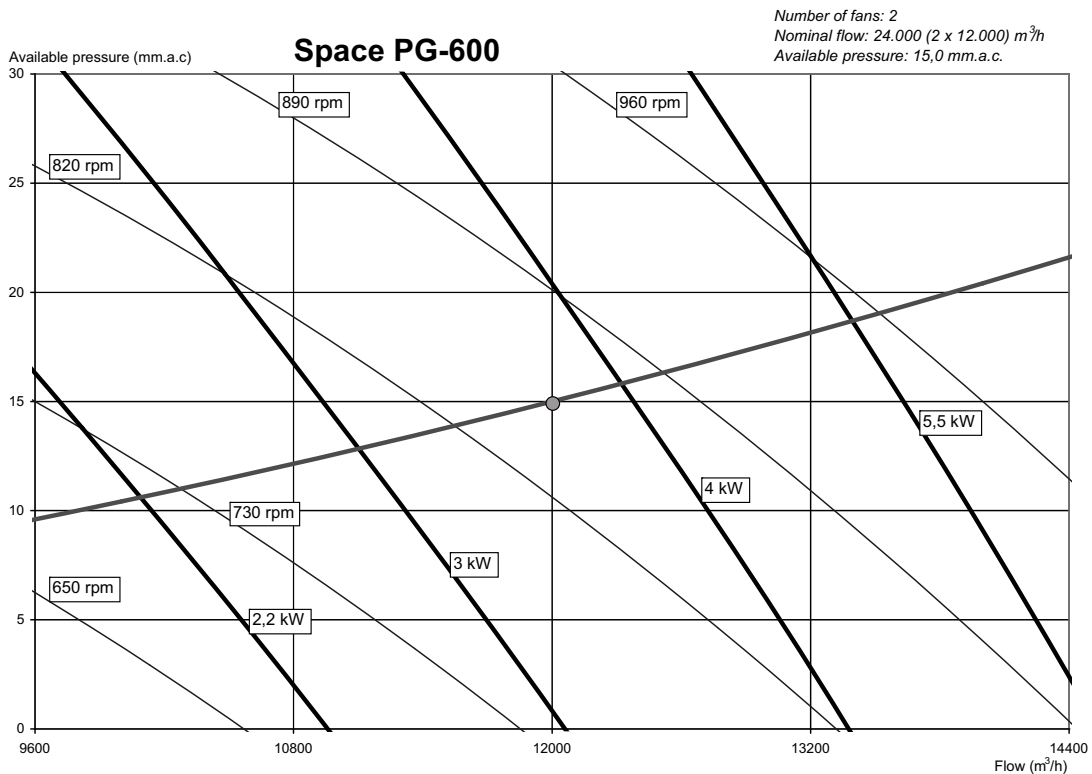
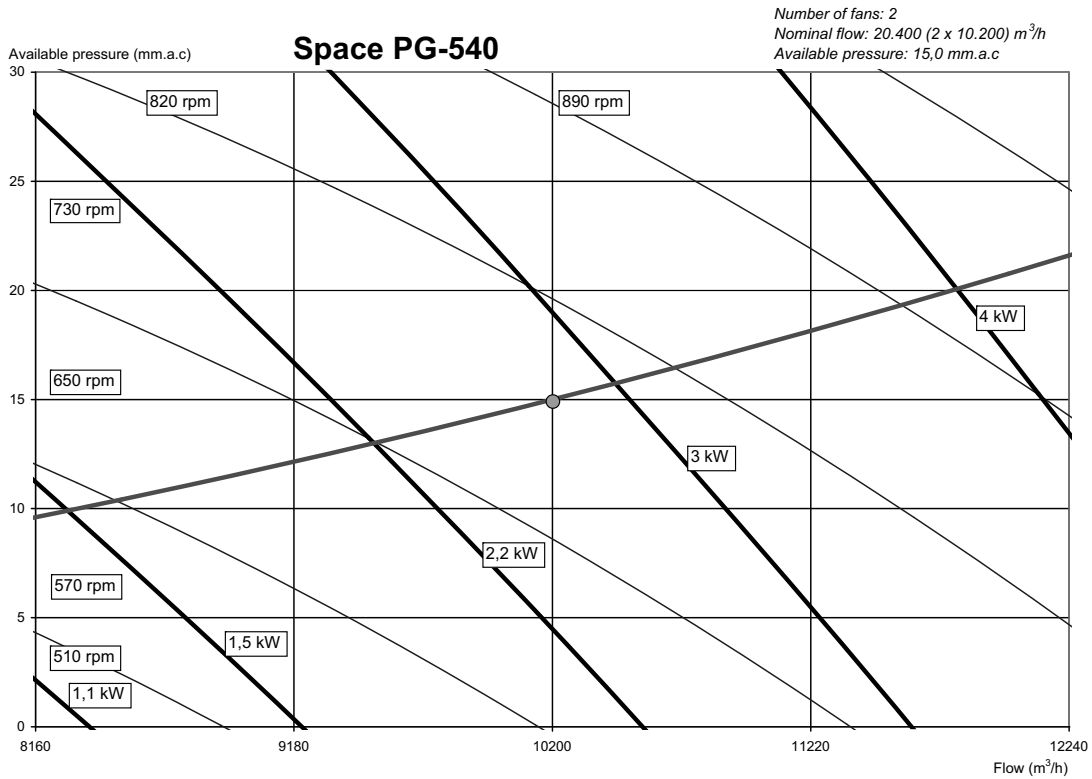
**Note:** the dot featured on the chart indicates the nominal operating point. The bend that goes through this point is the nominal installation bend (this bend gives an indication of the appearance of other possible installation bends).  
The motor to be selected is the one whose bend is located above the operating point.



# Air-air rooftop units with a built in gas burner

## Space PG

### STANDARD OUTLET FAN



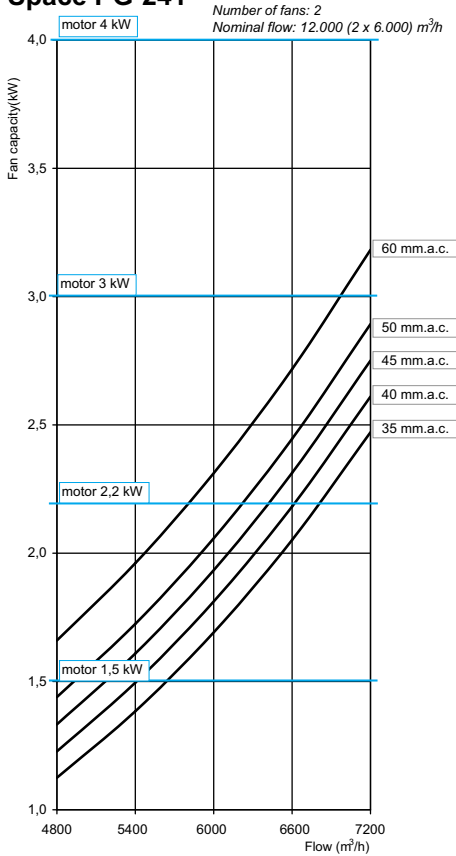
**Note:** the dot featured on the chart indicates the nominal operating point. The bend that goes through this point is the nominal installation bend (this bend gives an indication of the appearance of other possible installation bends).  
The motor to be selected is the one whose bend is located above the operating point.



# Air-air rooftop units with a built in gas burner

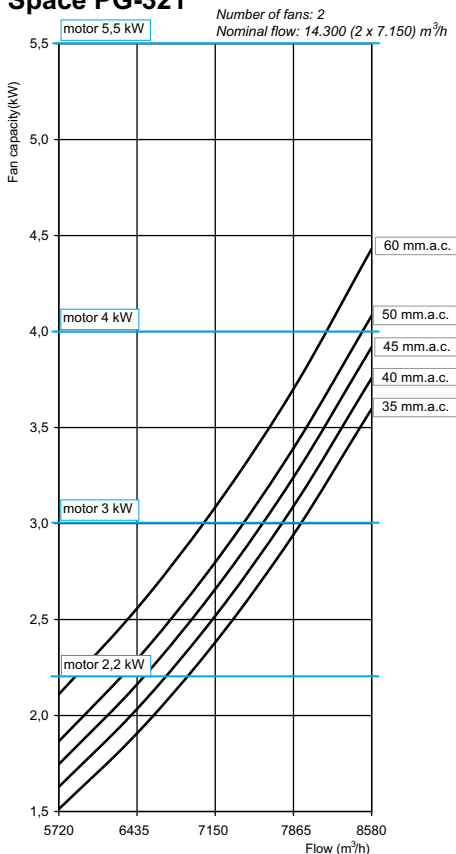
High-pressure outlet fan available (optional)

## Space PG-241



Space PG - 241				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	4800	1,5	1,1	1694
	5400	1,5	1,4	1808
	6000	2,2	1,7	1927
	6600	2,2	2,1	2051
	7200	3,0	2,5	2180
40	4800	1,5	1,2	1752
	5400	1,5	1,5	1861
	6000	2,2	1,8	1977
	6600	2,2	2,2	2098
	7200	3,0	2,6	2224
45	4800	1,5	1,3	1808
	5400	2,2	1,6	1914
	6000	2,2	1,9	2026
	6600	3,0	2,3	2144
	7200	3,0	2,8	2267
50	4800	1,5	1,4	1863
	5400	2,2	1,7	1965
	6000	2,2	2,1	2074
	6600	3,0	2,4	2189
	7200	3,0	2,9	2309
60	4800	2,2	1,7	1969
	5400	2,2	2,0	2064
	6000	3,0	2,3	2167
	6600	3,0	2,7	2277
	7200	4,0	3,2	2392

## Space PG-321



Space PG - 321				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	5720	2,2	1,5	1858
	6435	2,2	1,9	2002
	7150	3,0	2,4	2151
	7865	3,0	2,9	2306
	8580	4,0	3,6	2464
40	5720	2,2	1,6	1910
	6435	2,2	2,0	2050
	7150	3,0	2,5	2196
	7865	4,0	3,1	2347
	8580	4,0	3,8	2503
45	5720	2,2	1,7	1960
	6435	2,2	2,2	2097
	7150	3,0	2,7	2240
	7865	4,0	3,2	2388
	8580	4,0	3,9	2541
50	5720	2,2	1,9	2010
	6435	3,0	2,3	2143
	7150	3,0	2,8	2283
	7865	4,0	3,4	2428
	8580	5,5	4,1	2579
60	5720	2,2	2,1	2106
	6435	3,0	2,6	2233
	7150	4,0	3,1	2367
	7865	4,0	3,7	2507
	8580	5,5	4,7	2656

Space PG

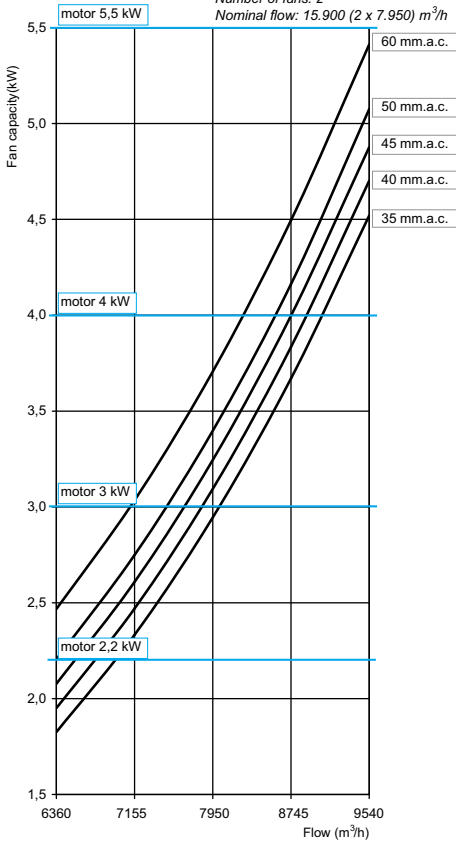


# Air-air rooftop units with a built in gas burner

## Space PG

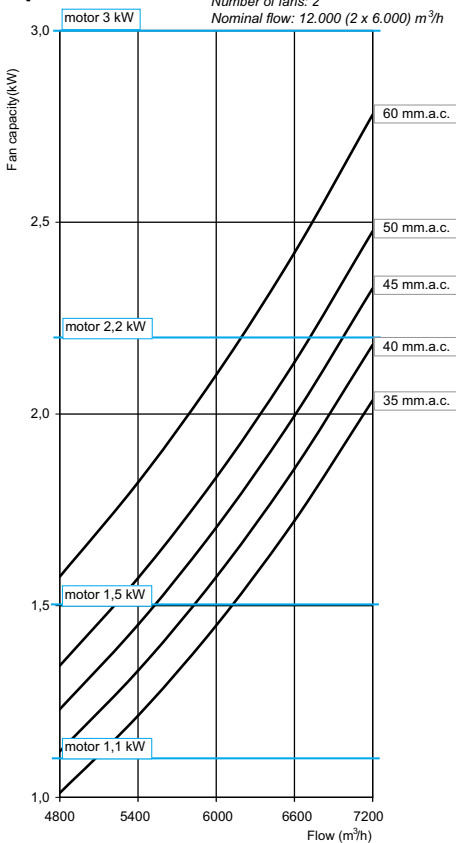
**HIGH-PRESSURE OUTLET FAN AVAILABLE (OPTIONAL)**

### Space PG-361



Space PG - 361				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	6360	2,2	1,8	1972
	7155	3,0	2,3	2135
	7950	3,0	2,9	2305
	8745	4,0	3,7	2481
	9540	5,5	4,5	2659
40	6360	2,2	2,0	2020
	7155	3,0	2,5	2180
	7950	4,0	3,1	2346
	8745	4,0	3,8	2517
	9540	5,5	4,7	2692
45	6360	2,2	2,1	2068
	7155	3,0	2,6	2224
	7950	4,0	3,2	2387
	8745	4,0	4,0	2555
	9540	5,5	4,9	2728
50	6360	3,0	2,2	2115
	7155	3,0	2,7	2267
	7950	4,0	3,4	2427
	8745	5,5	4,2	2593
	9540	---	---	---
60	6360	3,0	2,5	2206
	7155	4,0	3,0	2352
	7950	4,0	3,7	2506
	8745	5,5	4,5	2667
	9540	5,5	5,4	2832

### Space PG-242



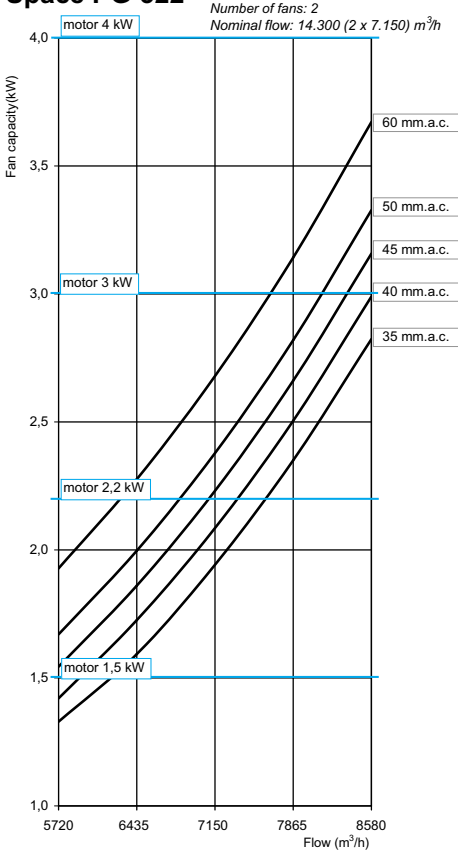
Space PG - 242				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	4800	1,1	1,0	1380
	5400	1,5	1,2	1454
	6000	1,5	1,4	1533
	6600	2,2	1,7	1617
	7200	2,2	2,0	1704
40	4800	1,5	1,1	1437
	5400	1,5	1,3	1507
	6000	2,2	1,6	1584
	6600	2,2	1,9	1665
	7200	2,2	2,2	1749
45	4800	1,5	1,2	1492
	5400	1,5	1,5	1559
	6000	2,2	1,7	1633
	6600	2,2	2,0	1711
	7200	3	2,3	1793
50	4800	1,5	1,3	1546
	5400	2,2	1,6	1610
	6000	2,2	1,8	1681
	6600	2,2	2,1	1756
	7200	3	2,5	1837
60	4800	2,2	1,6	1649
	5400	2,2	1,8	1708
	6000	2,2	2,1	1773
	6600	3	2,4	1844
	7200	3	2,8	1920



# Air-air rooftop units with a built in gas burner

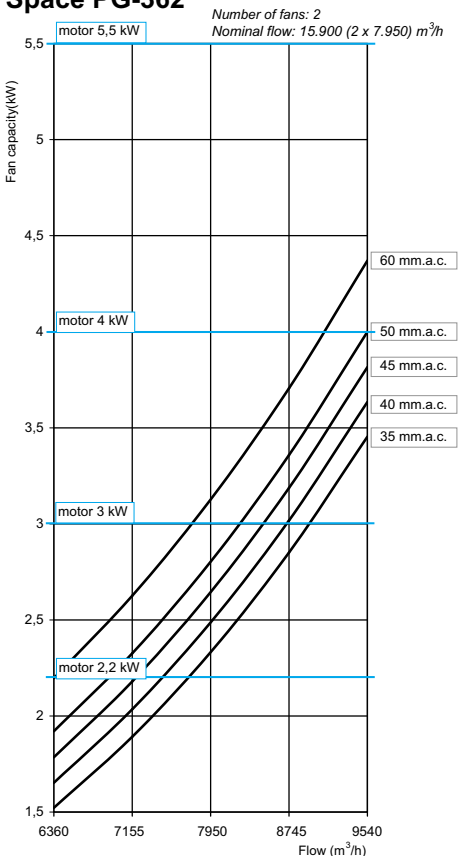
High-pressure outlet fan available (optional)

## Space PG-322



Space PG - 322				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	5720	1,5	1,4	1482
	6435	2,2	1,6	1575
	7150	2,2	1,9	1676
	7865	3	2,4	1781
	8580	3	2,8	1889
40	5720	1,5	1,4	1532
	6435	2,2	1,7	1624
	7150	2,2	2,1	1722
	7865	3	2,5	1824
	8580	3	3,0	1930
45	5720	2,2	1,5	1583
	6435	2,2	1,9	1672
	7150	3	2,2	1766
	7865	3	2,7	1866
	8580	4	3,2	1969
50	5720	2,2	1,7	1633
	6435	2,2	2,0	1718
	7150	3	2,4	1810
	7865	3	2,8	1907
	8580	4	3,3	2008
60	5720	2,2	1,9	1728
	6435	3	2,3	1808
	7150	3	2,7	1895
	7865	4	3,1	1987
	8580	4	3,7	2084

## Space PG-362



Space PG - 362				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	6360	2,2	1,5	1550
	7155	2,2	1,9	1659
	7950	3,0	2,3	1774
	8745	3,0	2,9	1892
	9540	4,0	3,5	2014
40	6360	2,2	1,7	1600
	7155	2,2	2,0	1706
	7950	3,0	2,5	1817
	8745	4,0	3,0	1932
	9540	4,0	3,6	2052
45	6360	2,2	1,8	1648
	7155	2,2	2,2	1751
	7950	3,0	2,6	1859
	8745	4,0	3,2	1972
	9540	4,0	3,8	2089
50	6360	2,2	1,9	1695
	7155	3,0	2,3	1795
	7950	3,0	2,8	1900
	8745	4,0	3,4	2011
	9540	4,0	4,0	2126
60	6360	2,2	2,2	1786
	7155	3,0	2,6	1880
	7950	4,0	3,1	1980
	8745	4,0	3,7	2086
	9540	5,5	4,4	2199

Space PG

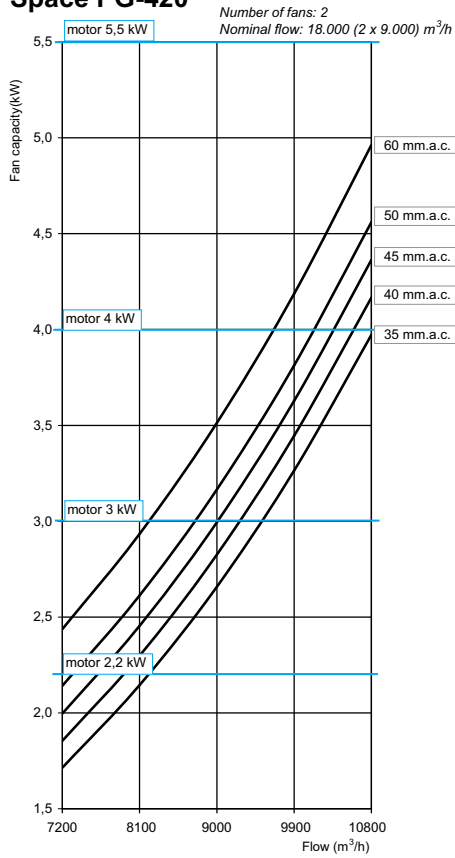


# Air-air rooftop units with a built in gas burner

## Space PG

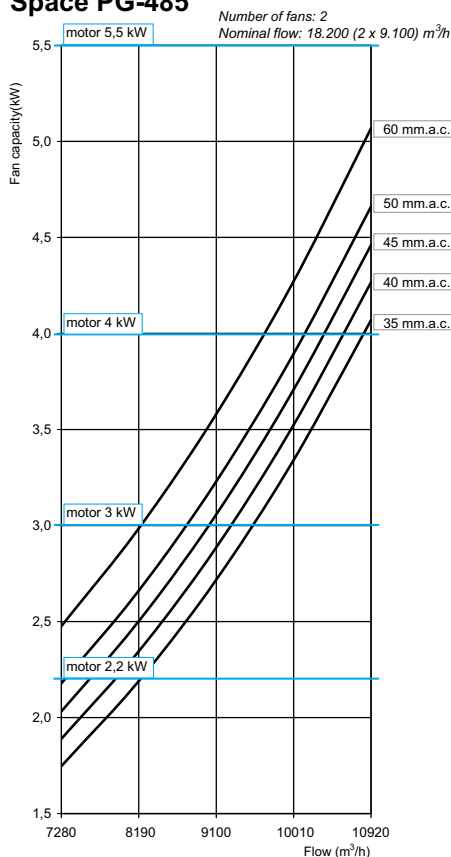
**HIGH-PRESSURE OUTLET FAN AVAILABLE (OPTIONAL)**

### Space PG-420



Space PG - 420				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	7200	2,2	1,7	1598
	8100	2,2	2,1	1717
	9000	3,0	2,7	1840
	9900	4,0	3,3	1968
	10800	4,0	4,0	2099
40	7200	2,2	1,9	1646
	8100	3,0	2,3	1761
	9000	3,0	2,8	1881
	9900	4,0	3,4	2006
	10800	5,5	4,2	2135
45	7200	2,2	2,0	1692
	8100	3,0	2,5	1804
	9000	3,0	3,0	1922
	9900	4,0	3,6	2044
	10800	5,5	4,4	2170
50	7200	2,2	2,1	1737
	8100	3,0	2,6	1846
	9000	4,0	3,2	1961
	9900	4,0	3,8	2081
	10800	5,5	4,6	2207
60	7200	3,0	2,4	1825
	8100	3,0	2,9	1928
	9000	4,0	3,5	2038
	9900	5,5	4,2	2154
	10800	5,5	5,0	2274

### Space PG-485



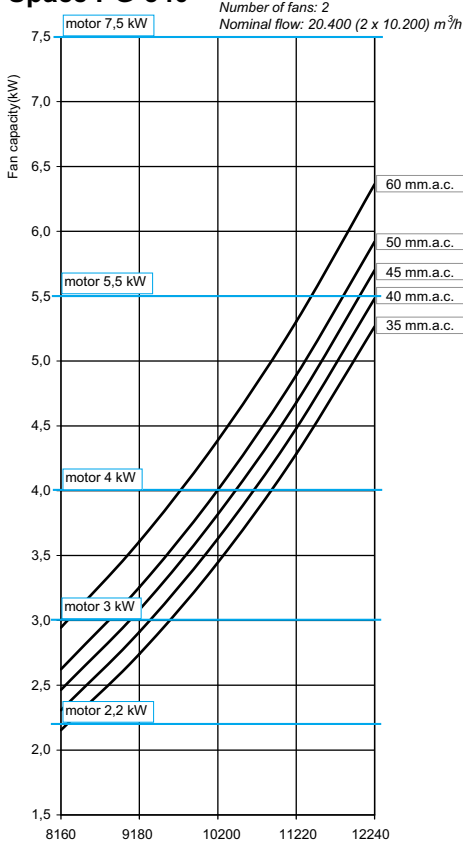
Space PG - 485				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	7280	2,2	1,7	1608
	8190	2,2	2,2	1728
	9100	3,0	2,7	1853
	10010	4,0	3,3	1983
	10920	5,5	4,1	2115
40	7280	2,2	1,9	1655
	8190	3,0	2,3	1772
	9100	3,0	2,9	1894
	10010	4,0	3,5	2021
	10920	5,5	4,3	2151
45	7280	2,2	2,0	1701
	8190	3,0	2,5	1815
	9100	4,0	3,1	1934
	10010	4,0	3,7	2059
	10920	5,5	4,5	2198
50	7280	2,2	2,2	1746
	8190	3,0	2,7	1857
	9100	4,0	3,2	1974
	10010	4,0	3,9	2095
	10920	5,5	4,7	2224
60	7280	3,0	2,5	1833
	8190	3,0	3,0	1939
	9100	4,0	3,6	2050
	10010	5,5	4,3	2168
	10920	5,5	5,1	2289



# Air-air rooftop units with a built in gas burner

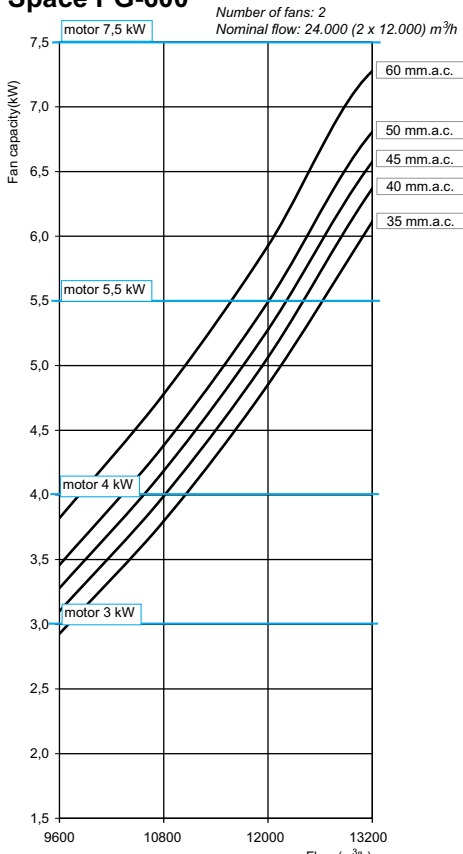
High-pressure outlet fan available (optional)

## Space PG-540



Space PG - 540				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	8160	2,2	2,2	1718
	9180	3,0	2,7	1858
	10200	4,0	3,4	2002
	11220	5,5	4,3	2151
	12240	5,5	5,3	2302
40	8160	3,0	2,3	1762
	9180	3,0	2,9	1898
	10200	4,0	3,6	2040
	11220	5,5	4,5	2188
	12240	5,5	5,5	2335
45	8160	3,0	2,5	1805
	9180	4,0	3,1	1938
	10200	4,0	3,8	2077
	11220	5,5	4,7	2223
50	12240	7,5	5,7	2368
	8160	3,0	2,6	1848
	9180	4,0	3,3	1978
	10200	5,5	4,0	2114
	11220	5,5	4,9	2255
60	12240	7,5	5,9	2400
	8160	3,0	2,9	1930
	9180	4,0	3,6	2054
	10200	5,5	4,4	2188
	11220	5,5	5,3	2322
	12240	7,5	6,4	2463

## Space PG-600



Space PG - 600				
Available pressure (mm.a.c)	Unitary flow (m <sup>3</sup> /h)	Motor output (kW)	Fan capacity (kW)	Fan speed (r.p.m.)
35	9600	3,0	2,9	1896
	10800	4,0	3,8	2065
	12000	5,5	4,9	2240
	13200	7,5	6,1	2417
	14400	---	---	---
40	9600	4,0	3,1	1936
	10800	4,0	4,0	2102
	12000	5,5	5,1	2273
	13200	---	---	---
45	14400	---	---	---
	9600	4,0	3,3	1975
	10800	5,5	4,2	2138
	12000	5,5	5,3	2307
50	13200	7,5	6,6	2480
	14400	---	---	---
	9600	4,0	3,5	2014
	10800	5,5	4,4	2174
	12000	5,5	5,5	2340
60	13200	7,5	6,8	2511
	14400	---	---	---
	9600	4,0	3,8	2089
	10800	5,5	4,8	2243
	12000	7,5	5,9	2404
	13200	7,5	7,3	2571
	14400	---	---	---

Space PG







## Air-air rooftop units with a built in gas burner

Notes:





