



Suspended free-blowing heaters with high performance and **low NOx emissions**, available in different outputs from 21 to 92 kW also with vertical downflow and with axial or centrifugal fan.

Gas unit heaters F Series

Large range for every kind of need

Robur F gas unit heaters are available in different heat outputs from 21 to 92 kW and in different versions: with axial fan and horizontal or vertical downflow, and with centrifugal fan for air duct system or air renew. They are independent and suitable for modular installation, in order to heat only when and where needed. Thanks to the premixing burner, F series reach combustion efficiency up to 92% and grant

extremely low NOx contents of exhaust gases, reducing environmental impact.

Ideal applications

Their wall-mounted position and reduced overall dimensions mean that F series heaters can heat large buildings too, including:

- industrial premises and workshops;
- laboratories;
- warehouses and storage facilities;
- supermarkets and showrooms.

Efficiencies up to **92%**

Large range from 21 to 92 kW

30 minutes to be warmed!

Also available in the following versions:



Vertical downflow

Centrifugal fan

Centrifugal fan for air renew



Robur gas unit heaters F Series



Scan QR-Code and discover

More than 200.000 Robur gas unit heaters installed in Europe.
<http://www.robur.com/products/heaters-line/>

<http://www.robur.com/products/heaters-line/f-series/description.html>

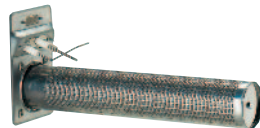
The winning characteristics of F Series

- **The Robur Ground Effect: energy savings guaranteed.** F series units are equipped with the patented Robur Heat Exchanger in aluminium special alloy, which splits the air flow into different layers having different temperatures, keeping the higher temperatures in the lower levels. This is called “Ground Effect” and reduces dramatically the thermal stratification in the environment.



Heat exchanger

- **Almost nil NOx emissions.** Thanks to the ON-OFF premix stainless steel burner, the F gas unit heaters grant the best gas/air ratio in all operational conditions, consequently granting virtually nil CO and NOx emissions.



Premix Burner

- **Easy to install.** Installation time and costs are kept very low. Three simple steps are enough: a hole in the wall for the inlet air supply and outlet of exhausted gas (both only 80 mm in diameter), connection to the gas supply and to the electricity supply.

- **Uniform temperatures, comfort and savings.** Tests conducted at Robur’s Research and Development Centre upon various gas-based heating systems have shown that with Robur gas unit heaters the difference in air temperature between 1 metre and 6 metres from the ground is only 1.5 °C, guaranteeing a homogeneous temperature in a short time.

- **No central heating plant, and lower installation costs.** Robur F heaters are installed directly in the room to be heated and do not require a central heating plant or any other additional building costs. Also given the suspended nature of the installation, precious floor area is kept free.

- **Equipped with:** Remote control box with lock-out light, reset switch and winter/summer switch; electrical cable connection between gas heater and remote control; LPG Kit.



Remote control



F Series vertical downflow

Gas heaters F series are available also as **vertical downflow units** that direct the warm air exactly where it is needed.

- These models are particularly suitable for the direct heating in a wide range of applications. They are ideally suited for distributing heat into those often hard to get to aisles, in premises containing floor-to-

ceiling racking, for instance: **warehouses, logistics and distribution centres.**

- Installing F with vertical downflow within the roof space the recirculation air pattern reduces the floor to ceiling heat gradient and they also work as a **destratification fan.**
- They use fans suitable for vertical downflow installation.

These gas fired unit heaters, on demand, can also be equipped with **centrifugal fan** and accessories for full fresh air, recirculation or a combination of fresh and recirculated air (air mixing chambers, regulation dampers, air filters, anti-vibration joints for ducting systems).



		F1 21	F1 31	F1 41	F1 51	F2 60	F2 80	F2 100	
Nominal heat input		kW	23.08	30.77	37.15	48.35	60.0	80.0	100.0
Nominal heat output		kW	21.0	28.0	33.8	44.0	55.2	73.6	92.0
Efficiency		%	91.0	91.0	91.0	91.0	92.0	92.0	92.0
Nominal gas consumption ⁽¹⁾	natural gas	m ³ /h	2.43	3.25	3.93	5.11	6.35	8.47	10.58
	LPG G30	kg/h	1.80	2.42	2.93	3.81	4.73	6.31	7.88
	LPG G31	kg/h	1.78	2.38	2.87	3.74	4.66	6.22	7.77
Nominal air flow ⁽²⁾		m ³ /h	2000	2700	3400	4200	5350	6300	8250
Temperature rise		K	31.1	30.7	29.5	31.0	30.6	34.6	33.0
Gas connection		"F	3/4						
Air inlet pipe diameter		mm	80						
Exhaust air pipe diameter		mm	80						
Electrical voltage			230V 1N - 50Hz						
Installed wattage		W	260	400	400	450	750	650	900
Air throw ⁽³⁾		m	14	16	20	22	31	36	40
Recommended installation height (for horizontal version)		m	2.5/3	2.5/3	2.5/3	3/3.5	3/3.5	3/3.5	3/4
Recommended installation height max/min (for vertical version)		m	8/4	10/4	10/4	12/4	14/5	14/5	14/5
Operating temperature range ⁽⁴⁾		°C	0/35						
Sound pressure level at 6 metres	in open field	dB(A)	41	43	44	46	50	52	54
	in typical installation	dB(A)	53	55	56	57	61.5	63	65.5
Weight		kg	55	59	68	80	75	98	120

⁽¹⁾ At 15 °C - 1013 mbar.

⁽²⁾ At 20 °C - 1013 mbar.

⁽³⁾ Throw for guidance only. Throw depends on height of building, mounting height to heater, room temperature and louvre setting.

⁽⁴⁾ Indoor temperature of the installation location. The unit's internal components have been tested from 0 °C to 60 °C.

Due to continuous product innovation and development, Robur reserves the right to change product specification without prior notice.

Gas unit heaters F C Series

F C series are gas unit heaters with centrifugal fan, especially designed for air ducting system and possibility of air renew.

Distinguishing characteristics

- Flange duct outlet suitable to be connected to an anti-

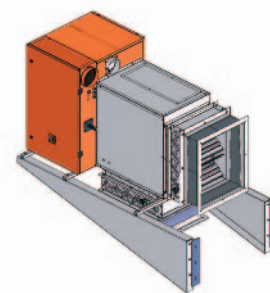
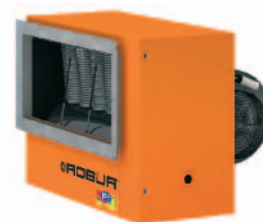


vibration joint (optional). Duct system will be sized according to the available pressure head of the model of heater.

- Burner with total **air pre-mixing** and low NOx emissions.
- Heating **efficiency up to 92%**.
- Air intake and exhaust outlet pipes both 80 mm in diameter, ensuring **quick and easy installation**.

Applications

- Changing rooms;
- Rooms used as offices, for meetings and for services;
- Restaurants, bars and shops;
- Sport halls.



Available accessories for air renew:

- mixing chamber
- air filter
- regulation damper
- antivibration joint
- wall bracket

		F1 21C	F1 41C	F1 51C	F2 80C	
Nominal heat input		kW	23.08	37.15	48.35	80.0
Nominal heat output		kW	21.0	33.8	44.0	73.6
Efficiency		%	91	91	91	92
Nominal gas consumption ⁽¹⁾	natural gas	m ³ /h	2.43	3.93	5.12	8.47
	LPG G30	kg/h	1.80	2.93	3.81	6.31
	LPG G31	kg/h	1.78	2.87	3.73	6.22
Air flow ⁽²⁾	with free outlet	m ³ /h	2500	3500	4000	8500
	at maximum admissible pressure drop	m ³ /h	2000	2600	2800	5800
Maximum available pressure head		Pa	110	120	180	250
Gas connection		"F	3/4			
Air inlet pipe diameter		mm	80			
Exhaust air pipe diameter		mm	80			
Electrical supply			230 V 1N - 50 Hz			400V 3N 50 Hz
Installed wattage		W	510	650	1100	1200
Dimensions	width	mm	630	770	770	1097
	height	mm	800	800	800	800
	depth	mm	990	1030	1020	1170
Weight		kg	66	82	87	165

⁽¹⁾ At 15 °C - 1013 mbar.

⁽²⁾ At 20 °C - 1013 mbar.

Due to continuous product innovation and development, Robur reserves the right to change product specification without prior notice.

Due to continuous product innovation and development, Robur reserves the right to change product specification without prior notice.

Robur S.p.A. advanced heating and cooling technologies www.robur.com export@robur.it
Via Parigi 4/6 24040 Verdellino/Zingonia (BG) Italy T +39 035 888111 F +39 035 4187114