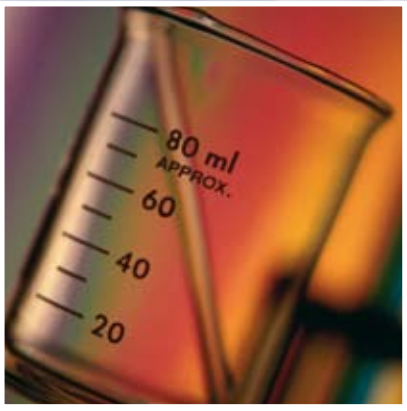
laboratory

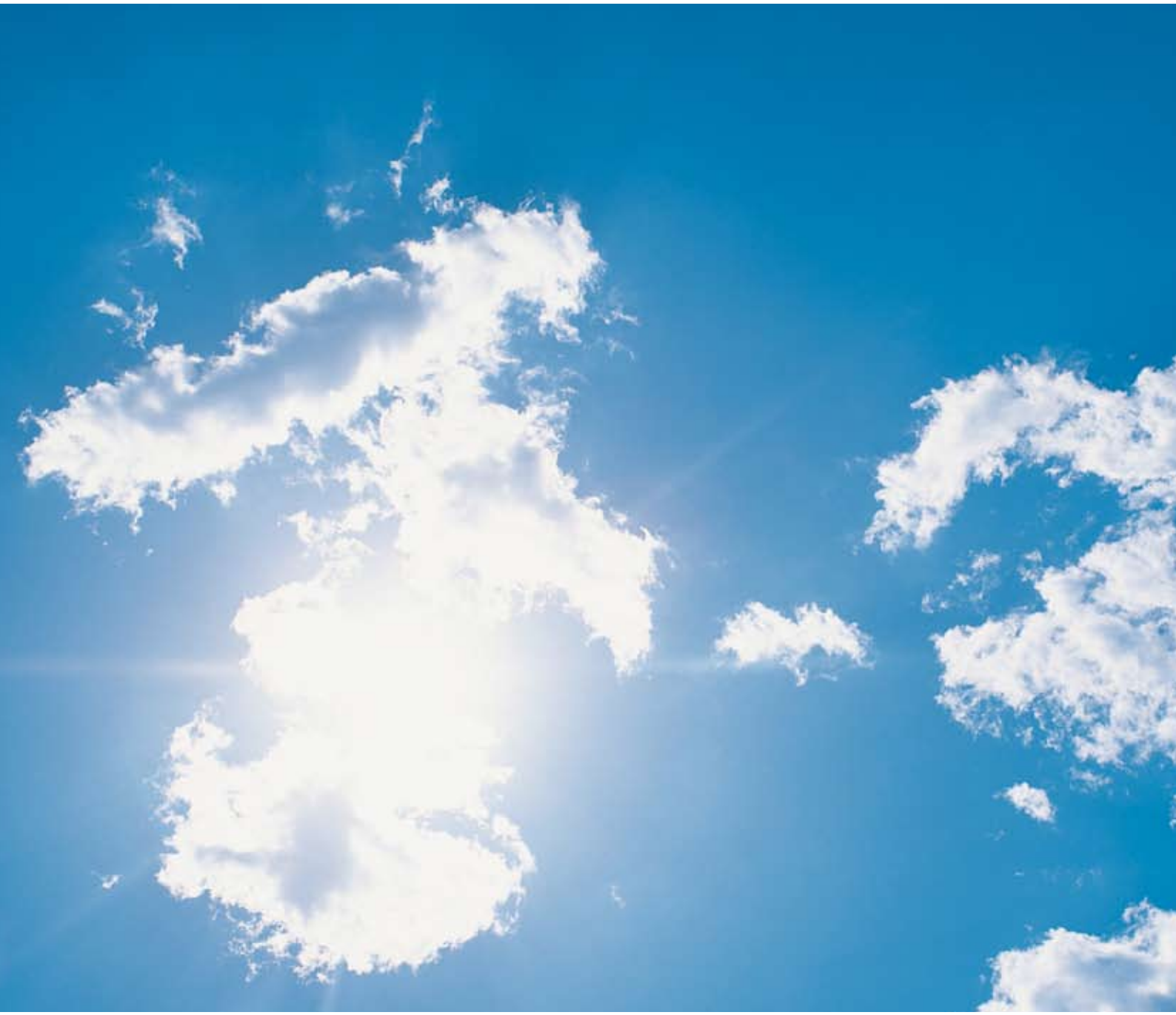


clean and quiet

air

JUN-AIR®

clean air for your lab



JUN-AIR introduced the first compressor almost 50 years ago and started the development of the technology and design, which has made JUN-AIR compressors the number one choice in laboratories worldwide.

JUN-AIR invests in the latest technology. Consequently, the compressors have a compact and elegant design, reflecting quality and they are, therefore, highly suitable for installation at the place of use.

Performance and design will always play a key role in the further development of JUN-AIR compressors. At the same time, concern for the environment, low energy consumption, minimum maintenance and user-friendly operation are given high priority.

JUN-AIR supplies clean and quiet air - a complete compressed air solution for your laboratory.

In today's modern laboratory, compressed air is required for numerous purposes. In many cases, the compressor has to be placed inside the lab due to limited space. With a noise level, equivalent to that of country quiet, the JUN-AIR range of compressors may be installed directly at the point of use, thus making it the obvious choice to avoid the nuisance of the noise that most compressors generate.

In addition to the benefits of quietness, the compressors are available with efficient filtration and drying systems. This enables them to provide absolutely clean and dry air.

JUN-AIR's extensive range complies with the company's traditional values - low noise level, reliability and long lifetime.

In addition to the standard range, JUN-AIR offers a variety of accessories and large customized units, meeting the requirements of the individual customer.

Model OF1202-40B

Model OF302 motor

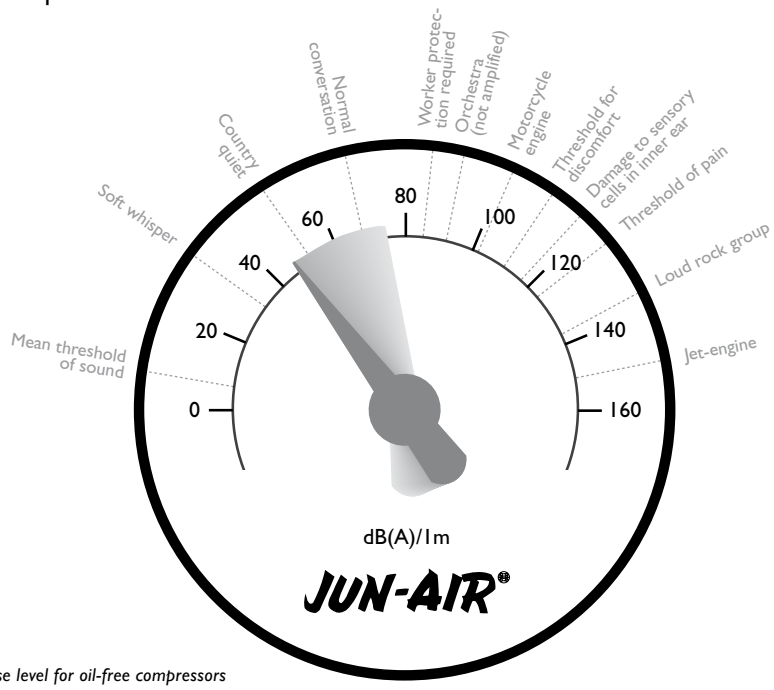
Model 2xOF1202-150BD6

Sophisticated use of clean and dry compressed air in laboratories, within the scientific, process and medical industries has lead to an increased demand for high-quality oil-free air compressors. JUN-AIR's extensive range complies with the company's traditional values - low noise level, reliability and long lifetime. Easy maintenance, a unique cooling system and wear-resisting piston rings ensure 100% continuous operation - even under extreme conditions.

Flexibility is one of the key features of the oil-free series. The ranges are available as separate compressor units or as complete solutions. The compact OF300 motor may be placed in any plane and the adjustable footprints allow retrofitting of existing installations. Several outlet ports, adjustable feet and multiple mounting positions, make the OF series the perfect choice for integrated, customized solutions.

All receivers for oil-free compressors are internally powder-coated in order to avoid corrosion, ensuring high air quality throughout the lifetime of the receiver. Having the lowest noise and vibration level in the market, JUN-AIR compressors are suitable for installation directly at or near the place of use.

The optimum solution is the M series where a metal cabinet reduces the noise level by approx. 75%.



Noise level for oil-free compressors

dry air

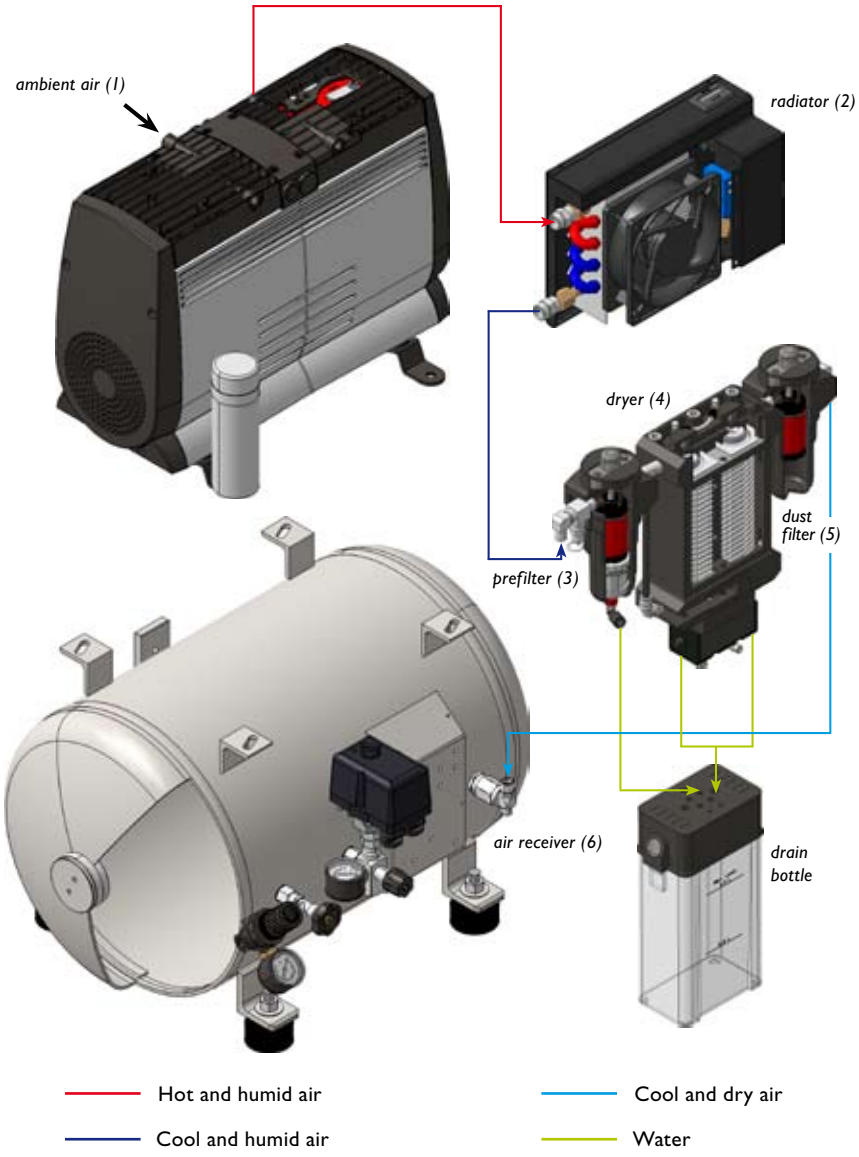
Atmospheric air contains water vapour, which condenses to water droplets when the compressed air cools. Water in compressed air causes a major inconvenience to the user, as it may damage the equipment connected to the compressor. At the same time, moisture and heat from the compression of the air create favourable conditions for the growth of micro-organisms. If the compressed air is in direct contact with human beings, animals, food or medical equipment, hygiene problems may arise.

The adsorption air dryer removes water vapour before accumulating the dry compressed air in the receiver, ensuring a constant and absolute pressure dew point between -30°C / -22°F and -40°C / -40°F @ 7 bar / 100 psi. At this pressure, bacteria become inactive at a pressure dew point below -23°C and may subsequently be removed. The risk of corrosion is eliminated at -30°C.

JUN-AIR offers a dryer/filter combination complying with the EU standard for breathing air (Pharmacopia) and with other international standards for classification of compressed air quality.

As an alternative to the adsorption air dryer, a range of membrane dryers is also available. The membrane dryer is smaller and requires less service. The membrane dryer may be preferred where the dew point only has to be lower than the ambient temperature, which will ensure moisture-free air.

DA membrane dryer, cut-away



Principle of the JUN-AIR adsorption drying system
Ambient air (1) is compressed to 8 bar / 120 psi.

In order to force as much water vapour as possible to condense before the air reaches the dryer, the compressed air is led through a radiator (2), decreasing the temperature of the compressed air to a level close to the ambient temperature.

The air then enters a prefilter (3) with a filtration degree of 0.01 micron, where solid particles and liquids (water) coalesce inside. After removal of dirt particles and water liquids, the air is conducted to the adsorption dryer (4), which has two columns each containing activated alumina. For two minutes, the compressed air flows upwards through the desiccant bed of the first column, where the remaining moisture is adsorbed.

Simultaneously, a small portion of the now dried air flows downwards through the other column and exhausts, removing moisture and thus regenerating the desiccant.

A camtimer is activated every second minute when the compressor is running and reverses the functions of each column, thereby ensuring a continuous supply of dry air.

After drying, the air passes another 0.01 micron filter (5), which retains any desiccant particles that may be carried through the system with the air. (As comparison, the smallest particle the human eye can see is in the order of 50 microns).

Finally, the now completely clean and dry air flows to the air receiver (6), which has an internal protective coating, for storage and/or use.

clean air in cabinets

Removal of the top without use of tools

Easy access to the compressor by use of a coin etc.

Model OF302-4S

The oil-free JUN-AIR compressors are available in protective metal cabinets. The cabinets reduce the sound emission from the already quiet oil-free compressor to a level that is approximately one quater of the level of basic compressors. The cabinets are designed individually for each model with an aesthetic look and with usability, hygiene as well as easy maintenance in mind. All cabinets of the M-range are equipped with rubber castors, enabling easy re-arrangement of installations and thus providing a high degree of flexibility.

The cabinets are treated with a matt textured powder coating which is hard wearing and enables easy cleaning. The colour of the cabinets is RAL 9002, making the compressors blend naturally with the equipment found in most laboratory, medical and other environments.

All cabinet compressors are equipped with efficient ventilation and cooling ensuring a continuous duty cycle.

Model OF1202-40MD3

quiet air

Model 18-40

Model 6 motor

Model 3-4

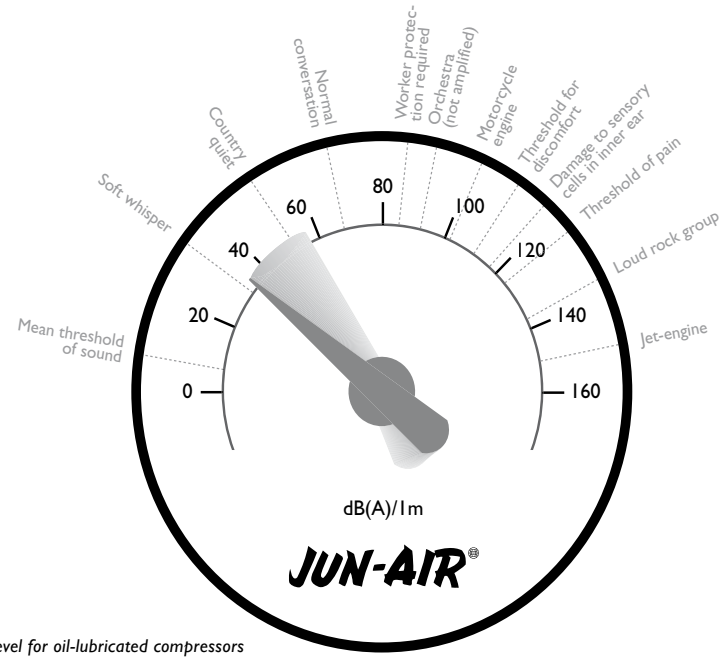
When a reliable supply of quiet compressed air is required, JUN-AIR's oil-lubricated range of compressors is the perfect choice. The noise level is as low as 35 dB(A) - far below the level of normal conversation.

The quiet, vibration-free and reliable compressors have a compact design and are easily mounted at the place of use.

The oil-lubricated piston compressor is supplied ready for use with a range of receiver sizes.

Furthermore, the compressors are available with various types of accessories, including trolleys and different filters for removal of oil and dirt particles as well as possible oil vapour and odours to improve the air quality.

Model 6-25



Noise level for oil-lubricated compressors

All models except 3-4, 6-4, 6-25 and 18-40 are oil-free. All oil-free compressors are available with adsorption dryer.
For all possible configurations - please see our website www.jun-air.com.

Model		**3-4**		**6-4**		**6-25**		**18-40**		**OF302-4B**		**OF302-4S**	
													
Voltage	V	230	120	230	120	230	120	230	230	230	120	230	120
Frequency	Hz	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]
Motor	HP	0.18	0.20	0.46	0.54	0.46	0.54	1.38	1.38	0.60	0.60	0.60	0.60
	kW	0.13	0.15	0.34	0.40	0.34	0.40	1.01	1.01	0.44	0.44	0.44	0.44
Displacement	l/min	17	20	50	60	50	60	150	180	108	138	108	138
	CFM	0.60	0.71	1.77	2.12	1.77	2.12	5.30	6.36	3.81	4.87	3.81	4.87
FAD @ 8 bar	l/min	11	13	32	37	32	37	96	111	38	44	38	44
	CFM	0.39	0.46	1.13	1.31	1.13	1.31	3.39	3.92	1.34	1.55	1.34	1.55
Max. pressure	bar	8[1)]	8[1)]	8[1)]	8[1)]	8[1)]	8[1)]	8[1)]	8[1)]	8[2)]	8[2)]	8[2)]	8[2)]
	psi	120[1)]	120[1)]	120[1)]	120[1)]	120[1)]	120[1)]	120[1)]	120[1)]	120[2)]	120[2)]	120[2)]	120[2)]
Max. current	A	0.9	2.4	2.9	6.2	2.9	6.2	8.7	8.7	3.4	6.6	3.4	6.6
Tank size	litres	4	4	4	4	25	25	40	40	4	4	4	4
	gallon	1.1	1.1	1.1	1.1	6.6	6.6	10.6	10.6	1.1	1.1	1.1	1.1
Weight	kg	18	18	23	23	29	29	62	62	22	22	44	44
	lbs	40	40	51	51	64	64	137	137	49	49	97	97
Noise level	dB(A)/1m	35	35	45	45	45	45	50	50	65	66	61	61
Dimensions	mm	384 x 333 x 342		384 x 333 x 342		378 x 378 x 555		556 x 446 x 557		390 x 320 x 350		252 x 614 x 617	
(l x w x h)	inch	15.1 x 13.1 x 13.5		15.1 x 13.1 x 13.5		14.9 x 14.9 x 21.9		21.9 x 17.6 x 21.9		15.5 x 12.5 x 13.5		9.9 x 24.2 x 24.3	

[1)] Higher pressure available upon request.
[2)] Available for operation at a maximum pressure of 10 bar / 145 psi upon request. Please note that operation at a higher pressure will influence the lifetime.
[8)] Operation at 50 and 60 Hz possible

Model		**OF302-25B**		**OF302-25BD2**		**OF302-25M**		**2xOF302-40B**		**2xOF302-40M**		**OF1201-25HB**	
													
Voltage	V	230	120	230	120	230	120	230	230	230	230	230	230
Frequency	Hz	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]
Motor	HP	0.60	0.60	0.60	0.60	0.60	0.60	1.20	1.20	1.20	1.20	1.22	1.22
	kW	0.44	0.44	0.44	0.44	0.44	0.44	0.88	0.88	0.88	0.88	0.90	0.90
Displacement	l/min	108	138	-	-	108	138	216	276	216	276	146	170
	CFM	3.81	4.87	-	-	3.81	4.87	7.63	9.75	7.63	9.75	5.16	6.00
FAD @ 8 bar	l/min	38	44	30[3)]	35[3)]	38	44	76	88	76	88	65	75
	CFM	1.34	1.55	1.06[3)]	1.24[3)]	1.34	1.55	2.68	3.11	2.68	3.11	2.30	2.65
Max. pressure	bar	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]
	psi	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]
Max. current	A	3.4	6.6	3.4	6.6	3.4	6.6	6.8	7.6	6.8	7.6	6.2	5.8
Tank size	litres	25	25	25	25	25	25	40	40	40	40	25	25
	gallon	6.6	6.6	6.6	6.6	6.6	6.6	10.6	10.6	10.6	10.6	6.6	6.6
Weight	kg	28	28	33	33	78	78	46	46	107	107	43	43
	lbs	62	62	73	73	172	172	101	101	236	236	95	95
Noise level	dB(A)/1m	65	66	65	66	47	48	68	69	50	50	77	80
Dimensions	mm	380 x 380 x 610		510 x 460 x 610		720 x 460 x 860		560 x 450 x 610		670 x 650 x 860		634 x 413 x 626	
(l x w x h)	inch	15.0 x 15.0 x 24.0		20.0 x 18.0 x 24.0		28.0 x 18.0 x 34.0		22.0 x 18.0 x 24.0		26.0 x 25.5 x 34.0		25.0 x 16.3 x 24.6	

[1)] Higher pressure available upon request.
[2)] Available for operation at a maximum pressure of 10 bar / 145 psi upon request. Please note that operation at a higher pressure will influence the lifetime.
[3)] Estimated value. Min. pressure required to operate dryer: 6 bar.
[8)] Operation at 50 and 60 Hz possible

Technical modifications reserved

All models OF1202 and 2xOF1202 are available for single or three phase voltages.
For all possible configurations - please see our website www.jun-air.com.

Model		**OF1202-40B**		**OF1202-40BD3**		**OF1202-40M**		**OF1202-40MD3**			
											
Voltage	V	230	230	230	230	230	230	230	230		
Frequency	Hz	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]		
Motor	HP	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00		
	kW	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47		
Displacement	l/min	290	328	-	-	290	328	-	-		
	CFM	10.24	11.58	-	-	10.24	11.58	-	-		
FAD @ 8 bar	l/min	130	146	104[3)]	117[3)]	130	146	104[3)]	117[3)]		
	CFM	4.59	5.16	3.67[3)]	4.13[3)]	4.59	5.16	3.67[3)]	4.13[3)]		
Max. pressure	bar	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]	8[2)]		
	psi	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]	120[2)]		
Max. current	A	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0		
Tank size	litres	40	40	40	40	40	40	40	40		
	gallon	10.6	10.6	10.6	10.	10.6	10.6	10.6	10.		
Weight	kg	59	59	70	70	59	59	70	70		
	lbs	130	130	154	154	130	130	154	154		
Noise level	dB(A)/1m	76	79	76	79	60	63	60	63		
Dimensions	mm	556 x 443 x 678		556 x 581 x 678		670 x 650 x 860		670 x 650 x 860			
(l x w x h)	inch	21.9 x 17.4 x 26.7		21.9 x 22.9 x 26.7		26.0 x 25.5 x 34.0		26.0 x 25.5 x 34.0			

[1)] Higher pressure available upon request.
[2)] Available for operation at a maximum pressure of 10 bar / 145 psi upon request. Please note that operation at a higher pressure will influence the lifetime.
[3)] Displacement is reduced by approx. 18-20% on units with dryer (D). Min. pressure required to operate dryer: 6 bar.
[8)] Operation at 50 and 60 Hz possible

Model		**2xOF1202-150B**		**2xOF1202-150BD6**		**2xOF1202-40M**		**2xOF1202-40MD6**			
											
Voltage	V	230	230	230	230	230	230	230	230		
Frequency	Hz	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]	50[8)]	60[8)]		
Motor	HP	4.00	4.00	4.00	4.00	4.0	4.0	4.0	4.0		
	kW	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94		
Displacement	l/min	580	656	-	-	580	658	-	-		
	CFM	20.48	23.17	-	-	20.48	23.24	-	-		
FAD @ 8 bar	l/min	260	292	208[3)]	234[3)]	260	292	260	292		
	CFM	9.18	10.3	7.35[3)]	8.25[3)]	9.18	10.3	9.18	10.3		
Max. pressure	bar	8[2)]	8[2]	8[2)]	8[2)]	8	8	8	8		
	psi	120[2)]	120[2)]	120[2)]	120[2)]	120	120	120	120		
Max. current	A	16.0	18.0	16.0	18.0	16.0	18.0	16.0	18.0		
Tank size	litres	150	150	150	150	40	40	40	40		
	gallon	39.6	39.6	39.6	39.6	10.6	10.6	10.6	10.6		
Weight	kg	129	129	146	146	162	162	179	179		
	lbs	284	284	322	322	357	357	395	395		
Noise level	dB(A)/1m	79	78	79	78	63	66	63	66		
Dimensions	mm	1272 x 530 x 871		1272 x 619 x 871		720 x 780 x 860		720 x 780 x 860			
(l x w x h)	inch	50.1 x 20.9 x 34.3		50.1 x 24.4 x 34.3		28.0 x 30.5 x 34.0		28.0 x 30.5 x 34.0			

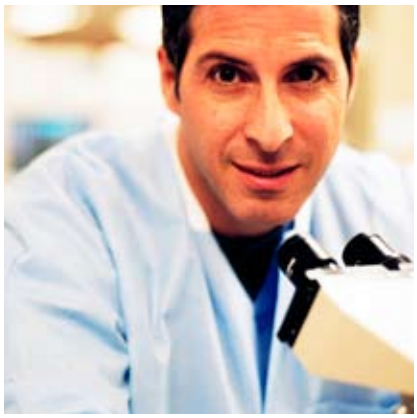
[1)] Higher pressure available upon request.
[2)] Available for operation at a maximum pressure of 10 bar / 145 psi upon request. Please note that operation at a higher pressure will influence the lifetime.
[3)] Displacement is reduced by approx. 18-20% on units with dryer (D). Min. pressure required to operate dryer: 6 bar.
[8)] Operation at 50 and 60 Hz possible

applications

JUN-AIR compressors are used in numerous applications. The use of compressed air in laboratories is well-known and the number of applications increases all the time.

The compressed air from the JUN-AIR compressors is clean and very quiet. Supplied with a dryer, eliminating condensate in the receiver, the air becomes 100% clean, dry and free from bacteria. If the already quiet compressors are delivered in a metal cabinet, the noise level is reduced even further.

To the right, you will find examples of JUN-AIR compressor models for different applications within the lab field.



Analysis

- **Rheometers**
  - 2xOF302-40M
  - OFI202-40BD3
  - OFI202-40MD3
- **Particle size analysis**
  - 18-40 with combination filter
  - OF302-25B
- **TOC, THA, DSC, TGA, TOD, CO2 analysis**
  - 6-25 with combination filter
  - OF302-4B
  - OF302-4S

Laboratory automation

- **Automated liquid dispensing**
  - 3-4
  - 6-4
  - OF302-4B
  - OF302-25B
- **Blood sampling**
  - OF302-25B
  - 2xOF302-40M
  - OFI202-40M
  - 6-25
- **Sampling for food analysis**
  - 3-4
  - 6-4
  - OF302-25B
- **Microscopy**
  - OF302-25B

Chromatography

- **GC - Gas Chromatography Zero air generator**
  - OF302-4B
  - OF302-4S
  - OF302-25M

LCMS instruments

- **Nitrogen generation**
  - OF302-25B/BD2
  - OF302-4S
  - OFI202-40B/BD3
  - OFI202-40M/MD3
  - 2xOFI202-40M/MD6

X-Ray

- OF302-25B
- 6-25 with combination filter

Spectroscopy

- **AA (Atomic Adsorption)**
  - 6-25
  - OF302-25B
  - OF302-25M
  - OFI202-40B
  - OFI202-40M
- **NMR spectrometer**
  - OFI202-40BD3
  - OFI202-40MD3
  - 2xOFI202-150BD6
  - 2xOFI202-40MD6
- **FT-IR spectrometer**
  - OF302-25M
  - OFI202-40B
  - OFI202-40M
  - 2xOFI202-40M
  - 2xOFI202-150B
- **ICP spectrometer**
  - OF302-4B
  - OF302-4S
  - OF302-25B
  - 2xOF302-40B
  - OFI202-40B

Sampling

- **Auto samplers**
  - OF302-4S
  - OF302-25B

Vibration free table

- 3-4
- 6-4
- 6-25
- OF302-4B

GAST GROUP

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